



651288



March 29, 2004

Mr. Frank Faranca
Case Manager, Bureau of Publicly Funded Site Remediation
New Jersey Department of Environmental Protection
401 E. State Street P.O. Box 028
5th Floor West
Trenton NJ 08625-0028

RE: NJPDES-DGW Permit 0086487 Effective March 1, 2000

Dear Mr. Faranca:

Two copies of the Discharge to Groundwater Report consisting of one (1) T-VWX-014, seven (7) VWX-015 Groundwater Analysis – Monitoring Well reports and report Sections 1.0 through 8.0 for the January through March 2004 quarter are enclosed.

Detection Monitoring was performed in accordance with Part 4-DGW Table 2, using the Ground Water Sampling and Analysis Plan approved in April 1996.

Lenox inspection logs were reviewed and a summary of the logs for the quarter is enclosed.

The “Mann-Whitney U-Test” statistical analysis of the ground water TCE results from the five (5) sentinel wells over eight (8) sampling quarters was rolled forward seventeen (17) quarters to cover the January 2004 data and is included in section 7 of the report. The null-hypothesis is accepted for sentinel wells MW-75, MW-76, MW-78 and MW-79A and we cannot statistically conclude that the TCE concentrations are decreasing for the seventeenth (17) quarter’s data set. The null-hypothesis is **not accepted** for sentinel well. MW-77 and we can statistically conclude that the TCE concentration is decreasing for the past eight quarters’ data set. In addition, MW-75 has been non-detect for the past eighteen consecutive quarters.

The **bold** data in the tables denotes elevated results, which exceed the site-specific GWQC’s for lead (10ug/l) and zinc (36.7 ug/l) as determined by calculating their arithmetic means from data reported in a 3-year study. Trichloroethylene levels are compared to the New Jersey limit of 1.0 ppb. Please note:

- MW-3 showed elevated levels of both total and dissolved lead, while MW-72 and MW-73 showed elevated levels of total lead but not dissolved lead. Both total and dissolved were detected at less than elevated levels in MW-4;
- MW-3, MW-4, MW-15, MW-17, MW-25, B-31, MW-73 and MW-74 showed elevated levels of both total and dissolved zinc, while and MW-76 showed an elevated level of dissolved zinc but not total zinc ;

Mr. Frank Faranca

March 29, 2004

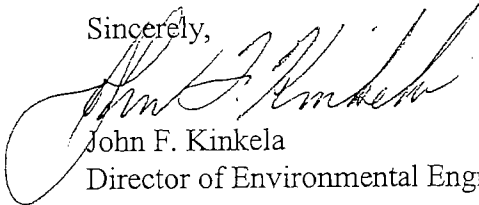
Page 2

Re: NJPDES-DGW Permit 0086487 Effective March 1, 2000

- Of the fifteen (15) wells sampled for TCE this quarter, one (1), was higher than the last round. six (6) wells decreased, MW-10, MW-25, B-31, MW-77, MW-78 and MW-79A. Six (6) wells, MW-1, MW-12S, MW-13, B-59, MW-75, MW-76, MW-80 and MW-81 remained essentially the same;
- TCE was elevated in three (3) of the five (5) downgradient sentinel wells, MW-77, MW-78 and MW-79A at 1.4, 1.3 and 5.4 ug/L- respectively. All three (3) of these sentinel wells decreased;
- The volatile organic compound cis-1,2-dichloroethene was detected in wells MW-77 and MW-79A. Trans-1,2-dichloroethene was detected in MW-79A. TCE daughter species were not detected in any other wells;
- The Monthly Daily Average Flows for the quarter were 320,563 gallons per day for December 2003, and 314,409 gallons per day for January and 308,448 gallons per day for February 2004;
- GAC Treatment System effluent unfiltered, water sample contained elevated zinc at 160 ug/L - and the filtered mid and effluent contained elevated zinc at 73.2 and 161 ug/L - respectively. The zinc is attributed to the higher zinc levels previously observed in B-31 and other wells;
- The No TCE daughter compounds were detected in the GAC Treatment System influent, mid or effluent water samples;
- Lead was detected, at less than elevated levels, in the GAC Treatment System, unfiltered, influent and effluent water samples and the filtered mid sample;
- TCE was detected below the New Jersey MCL of 1.0 ug/l in only one (1) of the three (3) residential, downgradient wells sampled.

Please call (609) 965-8272 if there are any questions.

Sincerely,



John F. Kinkela

Director of Environmental Engineering

Enclosures -Pomona DGW and TCE Quarterly Groundwater Monitoring Report – January 2004
Monitoring Round
-Summary of Inspection Logs – January through March 2004 Quarter

bcc: J.H. Ennis (w/attachments)
L.A. Fantin, Lenox (w/attachments)
~~Andrew Park~~ (w/attachments)
File

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

Form T-VWX-14

MONITORING REPORT - TRANSMITTAL SHEET

NJPDES No.

0086487

REPORTING PERIOD

MO YR MO YR

0104 thru 0304

PERMITEE:

Name LENOX INCORPORATED
Address 100 LENOX DRIVE
LAWRENCEVILLE, NEW JERSEY 08648

FACILITY:

Name LENOX CHINA, A DIVISION OF LENOX INCORPORATED
Address TILTON ROAD
POMONA, NEW JERSEY 08240 (County) ATLANTIC
Telephone (609) 965-8272

FORMS ATTACHED (Indicate Quantity of Each)

SLUDGE REPORTS - SANITARY

☐ T-VWX-007 ☐ T-VWX-008 ☐ T-VWX-009

SLUDGE REPORTS - INDUSTRIAL

☐ T-VWX-010A ☐ T-VWX-010B

WASTEWATER REPORTS

☐ T-VWX-011 ☐ T-VWX-012 ☐ T-VWX-013A

GROUNDWATER REPORT (As per permit)

☒ VWX-015 ☐ VWX-016 ☐ VWX-017

NJPDES DISCHARGE MONITORING REPORT

☐ EPA FORM 3320-01

OPERATING EXCEPTIONS

YES NO

DYE TESTING ☐ ☐

TEMPORARY BYPASSING ☐ ☐

DISINFECTION INTERRUPTION ☐ ☐

MONITORING MALFUNCTIONS ☐ ☐

UNITS OUT OF OPERATION ☐ ☐

OTHER ☐ ☐

(Detail any "yes" on reverse side
in appropriate space.)

AUTHENTICATION -

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment

LICENSED OPERATOR

Name _____

Grade & Registry No. _____

Signature _____

PRINCIPAL EXECUTIVE OFFICER or
DULY AUTHORIZED REPRESENTATIVE

Name JOHN F. KINKELA

Title DIR. OF ENVIRONMENTAL ENGINEERING

Signature [Signature] 3-29-04

Form VWX-15A

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

OWNER'S WELL ID No. MW-1

FACILITY NAME		SW ID No.
LENOX CHINA		
LAB NAME		
ACCUTEST, DAYTON, NJ		

NJPDES No.		WELL PERMIT No.		SAMPLE DATE			NJ LAB CERT No.			WQM USE <input type="checkbox"/> 28																							
S	NJ	0	0	8	6	4	8	7	3		6	-	0	3	0	2	5	-	2	YR	MO	DAY	0	4	0	1	2	2	1	2	1	2	9
1		2						8	9							16			17		22						23						27

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM

0	1	0	4
MO		YR	

0	3	0	4
MO		YR	

SUBMIT WITH SIGNED T-VWX-014

[illegible]

Form VWX-15A

GROUNDWATER ANALYSIS - MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

OWNER'S WELL ID No. MW-3

FACILITY NAME	LENOX CHINA	SW ID No.
LAB NAME	ACCUTEST, DAYTON, NJ	

SAMPLE DATE

NJPDES No.

WELL PERMIT No.

YR MO DAY

NJ LAB CERT No.

WQM USE

NJPDES NO. S NJ 0 0 8 6 4 8 7
 1 2 8

WHEELER UNIT NO. 3 6 - 0 3 0 2 7 - 9
 9 16

0 4 0 1 2 2 1 2 1 2 9
 17 22 23 27

 28

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM

0	1	0	4
MO		YR	

0	3	0	4
MO		YR	

SUBMIT WITH SIGNED T-VWX-014

J F M A M J J A S O N D
A E A P A U U U E C O E
N B R R Y N L G P T V C

[illegible]

[illegible]

Form VWX-15A

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

OWNER'S WELL ID No. MW-6

FACILITY NAME	LENOX CHINA	SW ID No.
LAB NAME	ACCUTEST, DAYTON, NJ	

SAMPLE DATE

NJPDES No.

WELL PERMIT No.

YR MO DAY

NJ LAB CERT No.

WQM USE

S NJ 0 0 8 6 4 8 7 3 6 - 0 3 2 7 0 - 1 0 3 1 0 2 9 1 2 1 2 9

1 2 8 9 16 17 22 23 27 28

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM

1	0	0	3
MO		YR	

1	2	0	3
MO		YR	

SUBMIT WITH SIGNED T-VWX-014

J F M A M J J A S O N D
A E A P A U U U E C O E
N B R R Y N L G P T V C

[illegible]

Form VWX-15A

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

OWNER'S WELL ID No. MW-9

FACILITY NAME

LENOX CHINA

SW ID No.	
-----------	--

LAB NAME

ACCUTEST, DAYTON, NJ

SAMPLE DATE

NJPDES No.

WELL PERMIT No.

YR MO DAY

NJ LAB CERT No.

WQM USE

NST DES NO.

S		0	0	8	6	4	8	7
1		2						8

3	6
9	

0	7	1	6	0
---	---	---	---	---

$$\frac{9}{16}$$

0	4	0	1	2	2
17			22		

1	2	1	2	9
23			27	

28

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM

0	1	0	4
MO		YR	

0	3	0	4
MO		YR	

SUBMIT WITH SIGNED T-VWX-014

J F M A M J J A S O N D
A E A P A U U U E C O E
N B R R Y N L G P T V C

R
E
M[illegible]

Form VWX-15A

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

OWNER'S WELL ID No. MW-10

NJPDDES No.										WELL PERMIT No.					SAMPLE DATE						NJ LAB CERT No.					WQM USE				
S	NJ	0	0	8	6	4	8	7	3	6	-	0	7	1	6	1	-	7	0	4	0	1	2	2	1	2	1	2	9	<div style="border: 1px solid black; width: 30px; height: 30px; margin: 0 auto;"></div>
1		2					8		9									16	17		22				23				27	28

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM

0	1	0	4
MO		YR	

0	3	0	4
MO		YR	

SUBMIT WITH SIGNED T-VWX-014

[illegible]

SUMMARY OF INSPECTION LOGS

Quarter January 2004 – March 2004

Facility: Glaze Basin Cap **Type:** Asphalt Paving

Inspections: Monthly **Required:** Monthly

Repairs/Maintenance: NA

Condition: East edge of cap, near Quonset hut is starting to show alligating due to forklift traffic. Otherwise, cap is intact with no breaks or cracks in asphalt noted.

Remarks: This area will be addressed in the spring.

Facility: Slip Mound Cap **Type:** Membrane with soil and vegetative cover - mounded

Inspections: Monthly **Required:** Monthly

Repairs/Maintenance: None

Condition: Vegetative cover is in good condition and no erosion was noted. Protective guardrail in good condition.

Remarks: None.

Facility: Nine (9) RCRA Monitoring Wells **Type:** N/A

Inspections: Monthly **Required:** Monthly

Repairs/Maintenance: None

Condition: All other wells in good condition.

Remarks: Sampled MW's 1, 3, 4, 6, 9 and 10 in January. Well #5 casing stickup replaced.

SUMMARY OF INSPECTION LOGS

Quarter January 2004 – March 2004

Facility: Seven (7) Recovery Wells **Type:** N/A

Inspections: Monthly **Required:** Monthly

Repairs/Maintenance: None

Condition: All wells intact and secure. RW-1, not in use.

Remarks: Pumps failed and were replaced in wells RW-2 and RW-6

Facility: Polishing Basin **Type:** N/A - Closed

Inspections: Monthly **Required:** Monthly

Repairs/Maintenance: N/A

Condition: Clean closed. Vegetative cover is in place, no erosion noted.

Remarks: None.

Facility: Tilton Pond **Type:** Earth Dike, Unlined

Inspections: One time per day **Required:** Monthly

Repairs/Maintenance: SWMU closure delayed until Summer 2004 due to high groundwater

Condition: Vegetative cover on berms is in good condition and no erosion was noted. No industrial waste discharge to pond since August 1992. No overtopping controls required as pond is permitted to discharge non-contact cooling water and stormwater to surface water under NJPDES-DSW Permit #0005177.

Remarks: As industrial wastewater no longer flows through pond, final cleaning and sampling are planned to effect clean closure.

SUMMARY OF INSPECTION LOGS

Quarter January 2004 – March 2004

Facility: Sludge Disposal Area **Type:** Asphalt Paving

Inspections: Monthly **Required:** No

Repairs/Maintenance: None.

Condition: Asphalt and fence in excellent condition.

Remarks: None

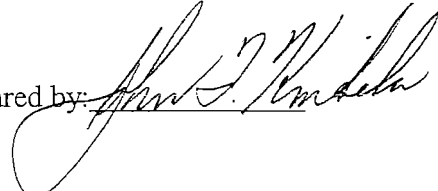
Facility: Area of Concern **Type:** Asphalt Paving, Membrane Cap & Fence

Inspections: Monthly **Required:** No

Repairs/Maintenance: None.

Condition: Asphalt and fence in excellent condition.

Remarks: None

Prepared by: 

Date: 12-23-03

DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

CN 029
Trenton, New Jersey 08625-029

SAMPLE COLLECTION AND PRESERVATION FORM
(To be completed by sampling crew)

BACKGROUND

- 1) Facility Name: Lenox China
- 2) NJPDES Number: NJ0086487
- 3) Facility Address: Tilton Road, Pomona, NJ 08240
- 4) Owner's Name: Lenox China
- 5) Owner's Address: Tilton Road, Pomona, NJ 08240

SAMPLING PLAN

- 6) Has a sampling and analysis plan been developed for this facility as stipulated under N.J.A.C. 7:14A-6.9?
Yes X or No _____
- 7) If yes, has the sampling plan been approved by the Department?
Yes X or No _____
- 8) If the sampling plan has not been submitted to the Department, attach with these submitted forms.

SAMPLE COLLECTION

- 9) Sample Date/Time: 01/22/04
- | Sampling Personnel (Name/Title) | Affiliation | Phone |
|---|------------------------------|---------------------|
| <u>Robyn Berner, Hydrogeologist</u> | <u>Gannett Fleming, Inc.</u> | <u>609-279-9140</u> |
| <u>Suzy Kelly, Environmental Engineer</u> | <u>Gannett Fleming, Inc.</u> | <u>609-279-9140</u> |

- 11) Weather conditions at the time of sampling: Cloudy, 30 degrees F

- 12) Is there a designated level of protection, and if so, indicate:
A _____ B _____ C _____ or D X _____

STATIC WATER LEVEL MEASUREMENT AND WELL EVACUATION

- 13) What method was utilized to determine the static water level?
Electrical (m-scope) X Stainless Steel Tape _____
Sonic _____ or Other _____: (explain) _____
- 14) Measuring Device Precise to: 0.01 feet
- 15) Model Number: 101 Manufacturer: Solinst
- 16) Was the water level indicator deconned between wells?
Yes X or No _____
- 17) Describe the decontamination procedure: Deionized water rinse, wipe with paper towel, final deionized water rinse, air dry
- 18) Wells are to be purged three to five times prior to sampling. If wells are not purged as stated above, explain and justify the exact purge method used.

- 19) Method used for well evacuation: Pump X or Bailer _____
- 20) If bailed to evacuate, what are the dimensions of the bailer?
N/A
- 21) What is the volume capacity of the bailer? N/A
- 22) Pump Type: Submersible _____ Bladder _____ Gas Piston _____
Gas Displacement _____ or Other X _____
Explain: Peristaltic Pump
- 23) Pump Model Number / Flow Rate: Randolph Pump Model 750/1-6 gpm
- 24) Pump manufacturer: Randolph-Austin
- 25) Describe decontamination method used to clean pump between wells:
None - A new piece of tubing was used at each monitoring well

- | <u>Casing Diameter</u> | <u>Gallons/Linear Foot</u> |
|------------------------|----------------------------|
| 2" | 0.16 |
| 4" | 0.65 |
| 6" | 1.47 |
| 8" | 2.61 |

- SEE TABLE QAQC1 ON PAGE 3A

[illegible]

Table QAQC1
State of New Jersey
Department of Environmental Protection
Division of Water Resources
Groundwater Sampling Data Collected January 22, 2004

Well Permit Number	Owners Well Number	TOC (Feet)	DTW (Feet)	TOC-DTW (Feet)	TDW (Feet)	Gallons per linear foot	Amount of Water in Casing (gallons)	Amount of Water Purged (gallons)	Number of Bail Volumes	Minutes pumping time	Time purge completed	Time sample collected
36-03025-2	MW-1	69.28	10.01	59.27	29.75	0.65	12.8	40	-	10	11:39	11:39
36-03027-9	MW-3	67.09	8.64	58.45	30.40	0.65	14.1	43	-	13	12:24	12:24
36-03119-4	MW-4	66.98	5.98	61.00	26.80	0.65	13.5	41	-	10	12:04	12:04
36-02913-0	MW-5	64.17	7.63	56.54	17.95	0.16	1.7	Not Sampled	-	-	-	-
36-03270-1	MW-6	65.08	7.38	57.70	30.75	0.65	15.2	46	-	12	10:04	10:04
36-07160-9	MW-9	69.51	11.55	57.96	31.15	0.65	12.7	40	-	10	11:17	11:17
36-07161-7	MW-10	63.51	5.94	57.57	29.30	0.65	15.2	46	-	10	10:33	10:33

SAMPLE COLLECTION AND PRESERVATION

- 30) Matrices Sampled:
Aqueous: Potable Well_____ Monitoring Well X
Surface Water_____ Leachate_____ Other_____
Nonaqueous: Soil_____ Sediment_____ Other_____
- 31) Dedicated Hose: Yes X or No_____
- 32) Hose Construction: PVC_____ Teflon_____ Tygon_____
Butyl_____ Other X Explain: Drinking water grade polyethylene
- 33) Sample Collection: (Time of collection for each well/sample should be indicated on the back of this page) See table QAQC1 on page 3A
A) Bailer-construction: Teflon_____ Stainless Steel_____
PVC_____ HDPE X
B) Beacon Bomb Sampler_____ Size:_____ oz.
C) Other_____ Explain:_____

- 34) Lines used to lower bailer: Stainless Steel_____
Cable/Leader_____ Teflon_____ PVC Rope_____ Other 100% poly
- 35) Are dedicated bailers used for each well? Yes X or No_____
- 36) Are bailers: Laboratory cleaned_____ Laboratory Name_____
Field Cleaned_____ Describe method:_____
Disposable bailers used only once then discarded.

- 37) Prior to use, are bailers, sample bottles, hoses, etc. Kept clean i.e., not placed in direct contact with ground, etc.:
Yes X or No_____
- 38) Are sample bottles supplied by laboratory? Yes X or No_____
- 39) Are sample preservation instructions supplied by laboratory?
Yes X or No_____
- 40) Are sample preservatives supplied by laboratory? Yes X or No_____

41) Sample Preservation:

Constituent	Teflon top in contact with sample	Head Space	Refrig- erated	Acidified	Alkanized	Bottles
Volatile Organics	Yes	No	Yes	Yes	N/A	N/A
TOX	N/A	N/A	N/A	N/A	N/A	N/A
Extractable Organics	N/A	N/A	N/A	N/A	N/A	N/A
Metals	N/A	N/A	Yes	Yes	N/A	N/A
Cyanide	N/A	N/A	N/A	N/A	N/A	N/A
Phenols	N/A	N/A	N/A	N/A	N/A	N/A
Biological	N/A	N/A	N/A	N/A	N/A	N/A

- 42) Indicate below any other constituents to be analyzed and their forms of preservation: TDS, TSS, color, sulfate, ammonia-nitrogen (acidified) -
all refrigerated
- 43) Were samples for metals analysis filtered in field? Yes X
or No _____
- 44) Were samples for metals analysis filtered in laboratory?
Yes _____ or No X
- 45) Were field blanks taken? Yes X or No _____
- 46) Were trip blanks taken? Yes X or No _____
- 47) What parameters/analysis were performed on field and trip blanks?
Volatile Organics X (FB, TB) Semi-volatile _____ Pesticides _____
PCBs _____ Metals X (FB) Other TDS, TSS, color, amm-n, sulfate
- 48) Prior to sampling, was an equipment blank performed? Yes _____
No X Sampling equipment is dedicated per well.
- 49) Prior to sampling each well, are disposable gloves worn?
Yes X or No _____
- 50) If yes, are the gloves changed between wells? Yes X
or No _____

CHAIN OF CUSTODY

- 51) Laboratory Name/Certification Number Accutest / 12129
- 52) Laboratory Address 2235 Route 130, Dayton, New Jersey 08810
- 53) Laboratory receipt date and time 01/22/04, 16:25
- 54) Attach Chain of Custody: Yes X or No

Sample Number	Relinquished by	Received by	Time	Date	Reason for change of custody
MW-1, MW-3, MW-4, MW-6, MW-9, MW-10, MW-2, FB, TB	R. Berner	Accutest	16:25	01/22/04	Relinquished to lab

AUTHENTICATION

I certify under penalty of law that I have personally examined and am familiar with the information contained in this report, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete and meets the description specified in N.J.A.C. 7:14A-2.5(a)10, and 6.1 through 6.12. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Sampler

Name/Title (printed) Robyn Berner, Hydrogeologist

Signature Robyn Berner Date: 2/20/04

Company Name and Address Gannett Fleming, 202 Wall Street, Princeton, NJ 08540

Notes:

1. The sampling team may use their own reporting forms only if the forms contain all the information required in this sample collection and preservation form.
2. If any of the items within this sample collection and preservation form vary for different monitor wells, the information must be documented within this form or as attachments to this form.

FOR N58072

LABORATORY SAMPLE CHAIN OF CUSTODY/CHRONICLE FOR
NJPDES COMPLIANCE MONITORING

Relinquisher of sample: (please print)

Name: Robyn Berner Signature: Robyn Berner

Company: Gannett Fleming

Title: Hydrogeologist

Date: 1-22-04 Time: 16:25

Laboratory sample recipient: (please print)

Name: CRAIG PARILLO Signature: Craig Parillo

Laboratory Name: ACCUTEST

NJDEP Laboratory Cert. No. _____ Title: S.M. TECH

Date: 1-22-04 Time: 1625

Did samples arrive cold? Yes ☒ or No ☐

Were the samples properly preserved? Yes ☒ or No ☐

If no, which analyses will be affected: _____

Did sample for the analyses of volatile organics contain
headspace? Yes ☐ or No ☒

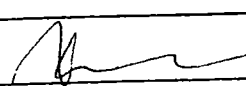
Was the septum in place with the TFE side down? Yes ☒ No ☐

FOR N58072

Sample Preparation Chemist

	<u>Name please print</u>	<u>Signature</u>	<u>Date</u>
1. Base/Neutrals			
2. Acids			
3. Pesticides			
4. Herbicides			
5. PCB's			
6. Metals			
7. Other			
8. Other			
9. Other			

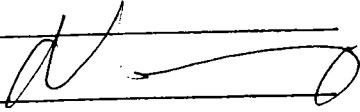
Analyst

	<u>Name please print</u>	<u>Signature</u>	<u>Date</u>
1. Base/Neutrals			
2. Acids			
3. Pesticides			
4. Herbicides			
5. PCB's			
6. Metals			
7. Volatiles	Cindy Xu		2/11/04
8. TOC			
9. TOX			
10. Phenols (total)			
11. Cyanide (total)			
12. Other			
13. Other			
14. Other			
15. Other			

Sample Preparation Chemist

	<u>Name please print</u>	<u>Signature</u>	<u>Date</u>
1. Base/Neutrals			
2. Acids			
3. Pesticides			
4. Herbicides			
5. PCB's			
6. Metals			
7. Other			
8. Other			
9. Other			

Analyst

	<u>Name please print</u>	<u>Signature</u>	<u>Date</u>
1. Base/Neutrals			
2. Acids			
3. Pesticides			
4. Herbicides			
5. PCB's			
6. Metals	Nancy Duan		2/11/04
7. Volatiles			
8. TOC			
9. TOX			
10. Phenols (total)			
11. Cyanide (total)			
12. Other			
13. Other			
14. Other			
15. Other			

Sample Preparation Chemist

	<u>Name please print</u>	<u>Signature</u>	<u>Date</u>
1. Base/Neutrals			
2. Acids			
3. Pesticides			
4. Herbicides			
5. PCB's			
6. Metals			
7. Other			
8. Other			
9. Other			

Analyst

	<u>Name please print</u>	<u>Signature</u>	<u>Date</u>
1. Base/Neutrals			
2. Acids			
3. Pesticides			
4. Herbicides			
5. PCB's			
6. Metals			
7. Volatiles			
8. TOC			
9. TOX Color	Kara Easomirski	Kara Easomirski	1-22-04
10. Phenols (total)			
11. Cyanide (total)			
12. other TOX	Milly Walker	Milhet Walker	1-26-04
13. other TSS	Milly Walker	Milhet Walker	1-26-04
14. other SO ₄	Her K Tkaczyk	Her K Tkaczyk	1-27-04
15. other Ammonia	Jill Nuber Jill Lubin	Jill Nuber Jill Lubin	2-2-04

Did any of the sample extractions and/or analyses exceed holding times? Yes _____ No ✓

If yes, which analyses will be affected:

If re-extraction and/or re-analysis is necessary, indicate the reason and attach another Laboratory Chain of Custody/Chronicle with the appropriate signatures and dates.

Quality Assurance Officer

Name (please print)

David N. Speer

Signature

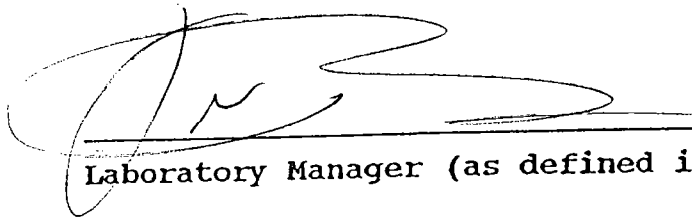
David N. Speer

Date

10 Feb 09

LABORATORY AUTHENTICATION STATEMENT FOR NJPDES
COMPLIANCE MONITORING

I certify under penalty of law, where applicable, this laboratory meets the Laboratory Performance Standards and Quality control requirements specified in N.J.A.C. 7:18, 40 CFR 136 for Water and Wastewater Analyses and SW 846 for Solid Waste Analyses. I have personally examined and am familiar with the information contained in this report, and that, based on my inquiry of those individuals immediately responsible for obtaining the information. I believe the submitted information is true, accurate, complete, and meets the standards specified in N.J.A.C. 7:18, 40 CFR 136, and/or SW 846. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment.

A handwritten signature in black ink, consisting of a large, stylized 'B' or 'P' shape with a horizontal line extending to the right, positioned above a solid horizontal line.

Laboratory Manager (as defined in N.J.A.C. 7:18)

Laboratories

GN. FB. TB

CHAIN OF CUSTODY

2235 Route 130, Dayton NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accufest.com

FED-EX Tracking #

Bottle Order Control #

Accutest Quote #

Accutest Job #	
----------------	--

N 58072

Client / Reporting Information						Project Information								Requested Analysis									Matrix Codes																	
Company Name Gannett Fleming						Project Name Lenox NJPDES																	DW - Drinking Water																	
Address 202 Wall St.						Street Tilton Rd.																	GW - Ground Water																	
City Princeton State NJ Zip 08540						City Pomona State NJ																	WW - Water																	
Project Contact Robyn Berner E-mail						Project # 42430.001																	SW - Surface Water																	
Phone # 609-279-9140						Fax #																	SO - Soil																	
Sampler's Name Robyn Berner						Client Purchase Order #																	SL - Sludge																	
Accutest Sample #						Field ID / Point of Collection						SUMMA #		Collection				Number of preserved Bottles												LAB USE ONLY										
												MEOH Vol %		Date	Time	Sampled By	Matrix	# of bottles	HQ	NH3	HK03	HK04	HNE	NH3OM	MEQH	BOD5														
- 1f	mw-1								1/22	11:39	RB	GW	9	3													X			X	X	X	X	X	X	X	AmETII, WC30,			
- 2f	mw-3								1/22	12:24			5						2		3										X	X	X	X	X	423				
- 3f	mw-4								1/22	12:04			5						2		3										X	X	X	X	X	AmETII, WC30				
- 4f	mw-6								1/22	10:04			5						2		3										X	X	X	X	X	423				
- 5f	mw-9								1/22	11:17			6						2	1	3							X			X	X	X	X	X					
- 6f	mw-10								1/22	10:33			8	3					2		3					X			X	X	X	X	X	X						
- 7f	mw-2								1/22	10:33			8	3					2		3					X			X	X	X	X	X	X						
- 8f	FB								1/22	12:00		LQ	2	2					2	1	3					X		X	X	X	X	X	X	X						
- 9	TB Filled 1/19/04 @ 0570								1/22	-		LQ	2	2												X														
Turnaround Time (Business Days)						Data Deliverable Information						Comments / Remarks																												
<input checked="" type="checkbox"/> Std. 15 Business Days Approved By: / Date:						<input type="checkbox"/> Commercial "A" <input type="checkbox"/> Commercial "B" <input checked="" type="checkbox"/> NJ Reduced <input type="checkbox"/> NJ Full <input type="checkbox"/> Other _____						<input type="checkbox"/> FULL CLP <input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input checked="" type="checkbox"/> EDD Format _____						QA/QC forms B+C and signatures																						
Emergency & Rush TIA data available VIA LabLink						Commercial "A" = Results Only																																		
Retinquished by Sampler: 1 Roby Bern						Date Time: 16:25 Received by: 1 Craig 1/22/04 @ 1605						Retinquished by Sampler: 2						Date Time: Received by: 2																						
Retinquished by: 3						Date Time: Received by: 3						Retinquished by: 4						Date Time: Received by: 4																						
Retinquished by: 5						Date Time: Received by: 5						Custody Seal # Preserved where applicable On Ice Cooler Temp						423/50VZ																						

4.8. 516, 52, 4.7

WELL SAMPLING LOG

Gannett Fleming
202 Wall Street
Princeton, New Jersey 08540
(609) 279-9140 (Telephone)
(609) 279-9436 (Facsimile)

I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 42430.001

Project Name: NJPDES Quarterly Monitoring

Sampled By: RB/SK

Well No.: MW-1

Well Use: Monitoring

Sample ID: MW-1

Sample Date: 1/22/04

Sample Time: 11:39

II. Well Information:

PID Reading: -

Well Diameter: 4 inches

Static Depth to Water: 10.01 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 29.75 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 19.74 feet

Volume of Standing Water: 12.83 gallons

Volume to be removed: 38.49 gallons

Actual Volume removed: 40.00 gallons

III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other _____

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other _____

Pump Flow Rate: 4.0 gpm

Purge Time: 10 min.

Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
11:31	10	4.76	0.088	9.5	11.4
11:34	20	4.92	0.094	9.3	11.8
11:36	30	4.84	0.095	9.6	11.9
11:38	40	4.90	0.096	9.8	11.9

Depth to water after purge: 10.05 ft. below m.p.

Time: 11:39

Depth to water prior to sampling: 10.05 ft. below m.p.

Time: 11:39

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other _____

Sample Odor: ☒ None

☐ Other _____

IV. Sample Analyses:

Sample Parameters: Voc, Metals, Color, TDS/TSS, Amm-N, Sulfate

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 1/22/04

WELL SAMPLING LOG

Gannett Fleming
202 Wall Street
Princeton, New Jersey 08540
(609) 279-9140 (Telephone)
(609) 279-9436 (Facsimile)

I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 42430.001

Project Name: NJPDES Quarterly Monitoring

Sampled By: RB/SK

Well No.: MW-3

Well Use: Monitoring

Sample ID: MW-3

Sample Date: 1/22/04

Sample Time: 12:24 ✓

II. Well Information:

PID Reading: -

Well Diameter: 4 inches

Static Depth to Water: 8.64 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 30.40 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 21.76 feet ✓

Volume of Standing Water: 14.14 gallons

Volume to be removed: 42.42 gallons

Actual Volume removed: 43.00 gallons

III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other _____

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other _____

Pump Flow Rate: 3.3 gpm

Purge Time: 13 min.

Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
12:14	10	5.32	0.271	6.3	14.6
12:16	20	5.35	0.293	6.3	13.6
12:19	30	5.37	0.250	6.5	13.5
12:21	40	5.42	0.263	6.7	13.9

Depth to water after purge: 8.75 ft. below m.p.

Time: 12:24

Depth to water prior to sampling: 8.75 ft. below m.p.

Time: 12:24 ✓

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other _____

Sample Odor: ☒ None

☐ Other _____

IV. Sample Analyses:

Sample Parameters: Metals, Color, TDS/TSS, Sulfate

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 1/22/04

WELL SAMPLING LOG

Gannett Fleming
202 Wall Street
Princeton, New Jersey 08540
(609) 279-9140 (Telephone)
(609) 279-9436 (Facsimile)

I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 42430.001

Project Name: NJPDES Quarterly Monitoring

Sampled By: RB/SK

Well No.: MW-4

Well Use: Monitoring

Sample ID: MW-4

Sample Date: 1/22/04

Sample Time: 12:04✓

II. Well Information:

PID Reading: -

Well Diameter: 4 inches

Static Depth to Water: 5.98 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 26.80 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 20.82 feet ✓

Volume of Standing Water: 13.53 gallons

Volume to be removed: 40.59 gallons

Actual Volume removed: 41.00✓ gallons

III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other _____

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other _____

Pump Flow Rate: 4.1 gpm

Purge Time: 10 min.

Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
11:56	10	5.90	0.237	10.6	12.6
11:58	20	5.81	0.235	9.3	10.9
12:00	30	5.64	0.224	8.2	11.1
12:02	40	5.73	0.221	9.1	11.5

Depth to water after purge: 6.05 ft. below m.p.

Time: 12:04

Depth to water prior to sampling: 6.05 ft. below m.p.

Time: 12:04✓

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other _____

Sample Odor: ☒ None

☐ Other _____

IV. Sample Analyses:

Sample Parameters: Metals, Color, TDS/TSS, Sulfate

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 1/22/04

WELL SAMPLING LOG

Gannett Fleming
202 Wall Street
Princeton, New Jersey 08540
(609) 279-9140 (Telephone)
(609) 279-9436 (Facsimile)

I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 42430.001

Project Name: NJPDES Quarterly Monitoring

Sampled By: RB/SK

Well No.: MW-6

Well Use: Monitoring

Sample ID: MW-6

Sample Date: 1/22/04

Sample Time: 10:04

II. Well Information:

PID Reading: -

Well Diameter: 4 inches

Static Depth to Water: 7.38 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 30.75 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 23.37 feet

Volume of Standing Water: 15.19 gallons

Volume to be removed: 45.57 gallons

Actual Volume removed: 46.00 gallons

III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other _____

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other _____

Pump Flow Rate: 3.8 gpm

Purge Time: 12 min.

Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
9:54	10	3.76	0.097	9.2	13.8
9:56	20	3.83	0.115	9.0	14.6
9:59	30	3.85	0.128	8.5	15.0
10:01	40	3.87	0.141	8.2	15.2

Depth to water after purge: 7.42 ft. below m.p.

Time: 10:04

Depth to water prior to sampling: 7.42 ft. below m.p.

Time: 10:04 ✓

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other _____

Sample Odor: ☒ None

☐ Other _____

IV. Sample Analyses:

Sample Parameters: Metals, Color, TDS/TSS, Sulfate

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 1/22/04

WELL SAMPLING LOG

Gannett Fleming
202 Wall Street
Princeton, New Jersey 08540
(609) 279-9140 (Telephone)
(609) 279-9436 (Facsimile)

I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 42430.001

Project Name: NJPDES Quarterly Monitoring

Sampled By: RB/SK

Well No.: MW-9

Well Use: Monitoring

Sample ID: MW-9

Sample Date: 1/22/04

Sample Time: 11:17 ✓

II. Well Information:

PID Reading: -

Well Diameter: 4 inches

Static Depth to Water: 11.55 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 31.15 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 19.60 feet ✓

Volume of Standing Water: 12.74 gallons

Volume to be removed: 38.22 gallons

Actual Volume removed: 40.00 gallons ✓

III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other _____

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other _____

Pump Flow Rate: 4.0 gpm

Purge Time: 10 min.

Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
11:10	10	6.05	0.424	0.8	15.8
11:12	20	5.72	0.322	2.4	16.5
11:14	30	5.60	0.297	3.0	16.8
11:16	40	5.53	0.286	2.9	16.9

Depth to water after purge: 11.60 ft. below m.p.

Time: 11:17

Depth to water prior to sampling: 11.60 ft. below m.p.

Time: 11:17 ✓

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other _____

Sample Odor: ☒ None

☐ Other _____

IV. Sample Analyses:

Sample Parameters: Metals, Color, TDS/TSS, Sulfate, Amm-N

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 1/22/04

WELL SAMPLING LOG

Gannett Fleming
202 Wall Street
Princeton, New Jersey 08540
(609) 279-9140 (Telephone)
(609) 279-9436 (Facsimile)

I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 42430.001

Project Name: NJPDES Quarterly Monitoring

Sampled By: RB/SK

Well No.: MW-10

Well Use: Monitoring

Sample ID: MW-10/MW-2

Sample Date: 1/22/04

Sample Time: 10:33

II. Well Information:

PID Reading: -

Well Diameter: 4 inches

Static Depth to Water: 5.94 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 29.30 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 23.36 feet ✓

Volume of Standing Water: 15.18 gallons

Volume to be removed: 45.54 gallons

Actual Volume removed: 46.00 gallons ✓

III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other _____

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other _____

Pump Flow Rate: 4.6 gpm

Purge Time: 10 min.

Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
10:25	10	5.14	0.074	10.4	13.9
10:27	20	5.18	0.085	10.4	15.0
10:29	30	5.21	0.106	9.0	15.5
10:31	40	5.24	0.122	8.1	15.7

Depth to water after purge: 5.98 ft. below m.p.

Time: 10:33

Depth to water prior to sampling: 5.98 ft. below m.p.

Time: 10:33 ✓

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other _____

Sample Odor: ☒ None

☐ Other _____

IV. Sample Analyses:

Sample Parameters: Voc, Metals, Color, TDS/TSS, Sulfate

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 1/22/04

LENOX CHINA
A DIVISION OF LENOX, INC.
POMONA, NEW JERSEY

POMONA DGW AND TCE
QUARTERLY GROUNDWATER
MONITORING REPORT
JANUARY 2004 MONITORING ROUND

PROJECT #42430.001/.002
MARCH 2004

Office Location:

GANNETT FLEMING
202 Wall Street
Princeton, New Jersey 08540

Office Contacts:

James M. Barish, CPG
Robyn Berner
(609) 279-9140

CONTENTS

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FIGURES

<u>No.</u>	<u>Description</u>
1	Groundwater Flow Map – January 20, 2004
2	Groundwater Flow Map – January 20, 2004 – Shallow Wells
3	Groundwater Flow Map – January 20, 2004 – Deep Wells
4	Extent of Trichloroethene in Groundwater – January 20-22, 2004
5	Residential Well Sampling Location Map

APPENDICES

APPENDIX A – Groundwater Sampling Logs

APPENDIX B – Groundwater Contour Map Report Form

APPENDIX C – Laboratory Data Reports (Bound Separately)

1.0 INTRODUCTION

This report summarizes the results of the groundwater monitoring programs that satisfy the requirements outlined in Lenox's NJPDES Discharge to Groundwater (DGW) permit (permit number NJ0086487) and the Memorandum of Agreement (MOA) between Lenox and NJDEP. All groundwater monitoring and analytical procedures were conducted in accordance with the protocols outlined in the most recently revised Groundwater Sampling and Analysis Plan (GWSAP) and Supplemental Groundwater Sampling and Analysis Plan (SGWSAP) approved by NJDEP.

This report presents the DGW and MOA sampling program data in a single document. The report components are as follows:

- Detection Monitoring Program
- GAC Treatment System Monitoring Program
- Depth to Water and Water Level Elevation Measurements
- TCE Monitoring Program
- SWMU No. 2 and Area of Concern Monitoring Program
- Classification Exception Area/Statistical Analysis Program
- Residential Well Sampling

The first three items satisfy the DGW permit monitoring requirements while the remaining items fulfill the requirements of the MOA.

2.0 DETECTION MONITORING PROGRAM (DGW)

The quarterly detection monitoring program is covered by the GWSAP and consists of the following for the first quarter:

- Sample monitoring wells MW-1, MW-3, MW-4, MW-6, MW-9 and MW-10.
- All samples are analyzed for total suspended solids (TSS), total dissolved solids (TDS), color, sulfate, and total and dissolved lead, zinc and sodium. Samples from MW-1 and MW-10 are also analyzed for total and dissolved iron. MW-1 and MW-9 are also analyzed for ammonia-nitrogen.
- Specific conductivity, pH, temperature and dissolved oxygen are measured in the field during purging and prior to sample collection.

Table 1, Section 2 summarizes the results of the current sampling event. The full laboratory data report is provided in Appendix C. Tables 2 through 7 summarize historical sampling results for each well since 1996.

The January 2004 monitoring results are summarized below:

- Total lead concentrations ranged from less than the laboratory reporting limit of 3.0 micrograms per liter ($\mu\text{g/l}$) to 24.9 \checkmark $\mu\text{g/l}$, with the highest concentration in the sample from MW-3 \checkmark . Dissolved lead concentrations ranged from less than the laboratory reporting limit of 3.0 $\mu\text{g/l}$ to 13.2 \checkmark $\mu\text{g/l}$, with the highest concentration in the sample from MW-3 \checkmark .
- Total zinc concentrations ranged from less than the laboratory reporting limit of 20 $\mu\text{g/l}$ to 3,420 \checkmark $\mu\text{g/l}$, with the highest concentration in the sample from MW-3 \checkmark . Dissolved zinc concentrations ranged from less than the laboratory reporting limit of 20 $\mu\text{g/l}$ to 3,430 \checkmark $\mu\text{g/l}$, with the highest concentration also in the sample from MW-3 \checkmark .

- Total sodium concentrations ranged from 9,760 µg/l to 45,200 µg/l, with the highest concentration in the sample from MW-9. Dissolved sodium concentrations ranged from 9,910 µg/l to 44,300 µg/l, with the highest concentration in the sample from MW-9.
- Iron was analyzed only in the samples from MW-1 and MW-10. Total iron was detected at concentrations of 669 µg/l in MW-1 and 1,780 µg/l in MW-10. Dissolved iron was not detected in either sample at concentrations exceeding the 100 µg/l laboratory reporting limit.
- Sulfate concentrations ranged from less than the laboratory reporting limit of 20 mg/l to 69.0 mg/l, with the highest concentration in the sample from MW-4.
- TDS concentrations ranged from 79 milligrams per liter (mg/l) to 199 mg/l, with the highest concentration in the sample from MW-9. TSS concentrations ranged from less than the laboratory reporting limit of 4.0 mg/l to 96.6 mg/l, with the highest concentrations in the sample from MW-10.
- Color concentrations ranged from less than the reporting limit of 5 color units to 35 color units (in MW-1).
- Ammonia-nitrogen concentrations were less than the 0.10 mg/l laboratory reporting limit in MW-1 and 0.18 mg/l in MW-9.

LENOX CHINA
POMONA, NEW JERSEY

TABLE 1 SECTION 2

GROUNDWATER QUALITY DATA - JANUARY 2004

Parameter	Units	MW-1	MW-3	MW-4	MW-6	MW-9	MW-10	MW-2 (MW-10 Dup)	FB	TB
pH, Field	pH units	4.90	5.42	5.73	3.87	5.53	5.24	5.24	-	-
Specific Conductance	ms	0.096	0.263	0.221	0.141	0.286	0.122	0.122	-	-
Oxygen, Dissolved	mg/l	9.80	6.70	9.10	8.20	2.90	8.10	8.10	-	-
Temperature, Field	°C	11.9	13.9	11.5	15.2	16.9	15.7	15.7	-	-
Total Suspended Solids	mg/l	9.0	15	6.0	<4.0	<4.0	96.0	95.0	<4.0	-
Total Dissolved Solids	mg/l	79	158	161	97.0	199	182	155	<10	-
Ammonia-Nitrogen	mg/l	<0.10	-	-	-	0.18	-	-	-	-
Color	CU units	35	20	5	<5	5	30	30	<5	-
Sulfate	mg/l	<20	33.6	69.0	45.5	55.4	28.7	29.1	<20	-
Iron, Dissolved	µg/l	<100	-	-	-	-	<100	<100	<100	-
Lead, Dissolved	µg/l	<3.0	13.2	3.8	<3.0	<3.0	<3.0	<3.0	<3.0	-
Sodium, Dissolved	µg/l	9,910	21,200	14,800	10,300	44,300	18,700	17,800	<5,000	-
Zinc, Dissolved	µg/l	<20	3,430	66.2	<20	<20	<20	<20	<20	-
Iron, Total	µg/l	669	-	-	-	-	1,780	2,010	<100	-
Lead, Total	µg/l	<3.0	24.9	5.9	<3.0	<3.0	6.0	8.4	<3.0	-
Sodium, Total	µg/l	10,900	20,900	14,200	9,760	45,200	16,000	16,100	<5,000	-
Zinc, Total	µg/l	<20	3,420	63.0	<20	<20	<20	<20	<20	-
Volatile Organic Compounds										
1,1-Dichloroethene	µg/l	<0.43	-	-	-	-	<0.43	<0.43	<0.43	<0.43
Cis-1,2-Dichloroethene	µg/l	<0.20	-	-	-	-	<0.20	<0.20	<0.20	<0.20
Trans-1,2-Dichloroethene	µg/l	<0.53	-	-	-	-	<0.53	<0.53	<0.53	<0.53
Methylene Chloride	µg/l	<0.64	-	-	-	-	<0.64	<0.64	<0.64	<0.64
Trichloroethene (TCE)	µg/l	<0.19	-	-	-	-	3.0	3.3	<0.19	<0.19
Vinyl Chloride	µg/l	<0.67	-	-	-	-	<0.67	<0.67	<0.67	<0.67
Sum of Volatile Organic Compounds	µg/l	<1.33	-	-	-	-	4.24	4.54	<1.33	<1.33

Notes:

- = Not Analyzed < = Not Detected J = Estimated Value

Values in **bold** font exceed the site specific Groundwater Quality Criteria for Lead (10 µg/l), Zinc (36.7 µg/l) or TCE (1.0 µg/l).

3.0 GAC TREATMENT SYSTEM MONITORING PROGRAM (DGW)

Groundwater samples from the GAC unit influent, mid-point, and effluent sampling ports were analyzed for TCE and its breakdown products (1,1-DCE, cis/trans 1,2-DCE, and vinyl chloride), total and dissolved iron, lead, and zinc, TDS, and TSS. The analytical results are summarized in Table 1, Section 3.

The January 2004 GAC monitoring results are summarized below:

- The GAC influent sample contained TCE at 4.5 µg/l. The mid-point and effluent samples did not contain TCE at concentrations exceeding the 0.50 µg/l laboratory reporting limit.
- 1,1-Dichloroethene, cis-1,2-dichloroethene, trans-1,2-dichloroethene and vinyl chloride were not detected in the influent, mid-point or effluent samples at concentrations greater than their respective laboratory reporting limits.
- Lead concentrations in the unfiltered influent, mid-point and effluent samples were 2.0 µg/l, <1.3 µg/l and 1.6 µg/l, respectively. Lead concentrations in the filtered samples were <1.3 µg/l, 1.7 µg/l and <1.3 µg/l, respectively.
- Zinc concentrations in the unfiltered influent, mid-point and effluent samples were 23.4 µg/l, 32.7 µg/l and 160 µg/l, respectively. Zinc concentrations in the filtered samples were 27.0 µg/l, 73.2 µg/l and 161 µg/l, respectively.
- Iron concentrations in the unfiltered influent, mid-point and effluent samples were <39.2 µg/l, <39.2 µg/l and 67.2 µg/l, respectively. Iron concentrations in the filtered samples were <39.2 µg/l, 97.6 µg/l and <39.2 µg/l, respectively.

- TDS concentrations in the influent, mid-point and effluent samples were 113 mg/l, 99 mg/l and 163 mg/l, respectively.
- TSS concentrations in the influent and mid-point samples were both less than the laboratory reporting limit of 10 mg/l. The TSS concentration in the effluent sample was 12 mg/l.

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TABLE 1 SECTION 3

GAC TREATMENT SYSTEM SAMPLING RESULTS, JANUARY 2004

Sample ID Sample Date	Permit Limits	PO-GAC-INF 1/14/2004	PO-GAC-MID 1/14/2004	PO-GAC-EFF 1/14/2004	Percent Removal
<i>Volatile Organic Compounds (µg/l)</i>					
Trichloroethene (TCE)	1.0	4.5 ✓	<0.5✓	<0.5✓	94.4%*
1,1-Dichloroethene	2.0	<0.5✓	<0.5✓	<0.5✓	NA
cis-1,2-Dichloroethene	2.0	<0.5✓	<0.5✓	<0.5✓	NA
trans-1,2-Dichloroethene	2.0	<0.5✓	<0.5✓	<0.5✓	NA
Vinyl chloride	5.0	<0.5✓	<0.5✓	<0.5✓	NA
<i>Metals (µg/l)</i>					
Iron (Unfiltered)	NL	<39.2✓	<39.2✓	67.2✓	NA
Iron (Filtered)	NL	<39.2✓	97.6✓	<39.2✓	NA
Lead (Unfiltered)	NL	2.0✓	<1.3✓	1.6✓	NA
Lead (Filtered)	NL	<1.3✓	1.7✓	<1.3✓	NA
Zinc (Unfiltered)	NL	23.4✓	32.7✓	160✓	NA
Zinc (Filtered)	NL	27.0✓	73.2✓	161✓	NA
TDS (mg/l)	NL	113✓	99✓	163✓	NA
TSS (mg/l)	NL	<10✓	<10✓	12✓	NA

Notes:

µg/l - Micrograms per liter

NL - No limit

mg/l - Milligrams per liter

NA - Not applicable

* - Results less than the laboratory minimum detection limit were considered to be one half the minimum detection limit

Values in **bold** exceed the site specific Groundwater Quality Criteria of 1.0 µg/l for TCE.

4.0 DEPTH TO WATER, WATER LEVEL ELEVATIONS, AND TREATMENT SYSTEM FLOW MONITORING (DGW)

4.1 Depth to Water and Water Level Elevations

The January 20, 2004 depth to water and water level elevation data is summarized in Table 1, Section 4. Depths to water in the wells on the south and north sides of the plant that screen the same interval as the recovery wells were used to develop the water level elevation and groundwater flow map (Figure 1). As shown in Figure 1, the groundwater flow direction is to the northeast, which is consistent with previous measurements.

The depth to water measurements in the well points installed downgradient of the recovery wells were plotted to develop the water level elevation and groundwater flow direction maps shown in Figures 2 and 3.

4.2 Treatment System Flow Monitoring

In a letter to Lenox dated April 18, 2000, NJDEP requested that Lenox propose an "Average Daily Volume" (ADV) that would represent the minimum pumping volume required to adequately capture the TCE plume. The ADV would be calculated by dividing the total volume of groundwater extracted by the recovery system each month by the number of days in the month and would be reported quarterly to NJDEP. In a letter to NJDEP dated May 19, 2000, Lenox proposed an ADV of 268,000 gallons per day, which was based on the results of groundwater modeling and the empirical water level and groundwater chemistry data developed since the recovery system started in 1991.

During the period December 1 through December 31 2003, the calculated ADV was 320,563 gallons per day. During the period January 1 through January 31, 2004, the calculated ADV was 314,409 gallons per day. During the period February 1 through February 29, 2004, the calculated ADV was 308,448 gallons per day.

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TABLE 1 SECTION 4

WATER LEVEL MEASUREMENTS, JANUARY 20, 2004

Well No.	Measuring Point Elevation (ft. above mean sea level)	Depth to Water (ft. below MP)	Water Level Elevation (ft. above mean sea level)
P1	65.69	6.52	59.17
P1A	66.32	6.78	59.54
P1B	66.34	6.85	59.49
P5	66.74	6.10	60.64
P5A	66.74	7.56	59.18
P8A	70.02	10.35	59.67
P8B	70.07	9.83	60.24
P9A	70.90	11.60	59.30
P9B	70.97	11.74	59.23
P9C	71.31	11.77	59.54
MW1	69.28	10.01	59.27
MW3	67.09	8.64	58.45
MW4	66.98	5.98	61.00
MW5	64.17	7.63	56.54
MW6	65.08	7.38	57.70
MW7	67.31	9.20	58.11
MW8	67.16	8.37	58.79
MW9	69.51	11.55	57.96
MW10	63.51	5.94	57.57
MW11	63.05	6.55	56.50
MW12D	62.89	6.20	56.69
MW12S	62.62	5.84	56.78
MW13	64.66	7.53	57.13
MW14D	63.63	6.47	57.16
MW14S	63.64	6.42	57.22
MW15	66.07	8.00	58.07
MW16	62.07	5.73	56.34
MW17	62.09	5.59	56.50
MW23	61.49	5.45	56.04
MW23A	61.78	5.78	56.00
MW24	62.60	6.41	56.19
MW25	61.13	5.17	55.96
MW25A	61.29	5.29	56.00
MW25B	61.22	5.22	56.00
MW26A (B30A)	62.48	6.70	55.78
MW26B (B30B)	61.65	5.85	55.80
MW72	64.19	5.71	58.48
MW73	63.06	5.20	57.86
MW74	62.56	5.29	57.27
MW75	60.15	4.54	55.61
MW76	60.60	5.16	55.44
MW77	60.41	5.07	55.34
MW78	59.84	4.30	55.54
MW79A	60.51	4.80	55.71
MW80	62.49	4.70	57.79
MW81	61.90	5.58	56.32
B31	62.19	6.72	55.47
B32	63.29	7.59	55.70
B53	62.31	5.55	56.76
B54	62.39	5.65	56.74
B59	60.02	4.45	55.57
B66	61.71	5.98	55.73
B66A	61.60	5.84	55.76
B66B	61.86	6.08	55.78
B67	62.29	6.71	55.58
B70A	61.39	5.32	56.07
B71	62.31	6.50	55.81
PZ1S	60.27	4.67	55.60
PZ1D	60.52	4.93	55.59
PZ2S	60.52	4.90	55.62
PZ2D	60.70	5.07	55.63
PZ3S	61.47	5.88	55.59
PZ3D	61.60	5.99	55.61
PZ4S	60.80	5.14	55.66
PZ4D	61.09	5.50	55.59
PZ5S	60.47	4.72	55.75
PZ5D	60.56	4.90	55.66
PZ6S	60.79	5.09	55.70
PZ6D	60.73	5.05	55.68

5.0 TCE MONITORING PROGRAM (MOA)

5.1 Background

A groundwater investigation performed at the Lenox China facility between January 1987 and February 1990 by Geraghty & Miller (G&M) identified two TCE plumes emanating from an antecedent drum storage pad and degreaser sump. Both antecedent waste handling areas are no longer in use. A second on-site degreaser sump was removed from service in June 1993. Lenox initiated a quarterly groundwater monitoring program to delineate and track the TCE plumes identified by G&M. The monitoring results were also used to design the GWCAS.

5.2 Field Procedures

Groundwater samples were collected from fifteen monitoring wells at the Lenox facility and along White Horse Pike on January 20-22, 2004. All sampling was performed in accordance with the most recently revised (April 1996) GWSAP and SGWSAP approved by the NJDEP.

Each well used to monitor the TCE remediation system contains a three-quarter-inch inner-diameter pump column attached to a one-foot section of well screen. The bottom of the pump column screen is set approximately two feet above the top of the well screen to ensure that the total volume of standing water in the well casing is removed during purging. To purge the wells, a peristaltic pump was attached to the top of the pump column using drinking-water grade polyethylene tubing. Three to five times the volume of standing water in each well was removed and field parameters (pH, specific conductivity, temperature and dissolved oxygen) were monitored during purging. The field parameter data is provided on the well sampling logs in Appendix A. Samples for metals analysis were collected directly from the discharge of the peristaltic pump. A new section of tubing was used for each well to avoid cross-contamination. Samples for VOC analysis were collected with 60 cc Teflon bailers dedicated to each well.

Unfiltered samples were analyzed for VOCs, iron, zinc, lead, TDS and TSS. Filtered samples were analyzed for iron, zinc and lead. Field blank and duplicate samples collected during the

monitoring program and a trip blank supplied by the laboratory were analyzed for quality assurance purposes. All analyses were performed by Accutest Laboratories, located in Dayton, New Jersey (NJDEP certification No. 12129).

5.3 Groundwater Monitoring Results

The groundwater analytical data is summarized in Tables 1, 2, 3 and 4, Section 5. The extent of TCE in groundwater during the October 2003 monitoring round is shown on Figure 4. The laboratory data reports are provided in Appendix C, which is bound separately.

The January 2004 monitoring results are summarized below:

- The TCE concentration increased in well MW-15 since the last monitoring round (0.67 J $\mu\text{g/l}$ in October 2003 to 0.96 J $\mu\text{g/l}$ in January 2004).
- TCE concentrations decreased in wells MW-10, MW-25, B-31, MW-77, MW-78 and MW-79A since the last monitoring round. The largest decrease occurred in well MW-10 (5.8 $\mu\text{g/l}$ in October 2003 to 3.0 $\mu\text{g/l}$ in January 2004).
- The TCE concentration remained the same (1.3 $\mu\text{g/l}$) in MW-12S.
- TCE concentrations remained effectively unchanged at less than the laboratory reporting limit in wells MW-1, MW-13, B-59, MW-75, MW-76, MW-80 and MW-81.
- Cis-1,2-dichloroethene was detected in the samples from wells MW-77 (0.89 J $\mu\text{g/l}$) and MW-79A (3.3 $\mu\text{g/l}$). Trans-1,2-dichloroethene was detected in the sample from well MW-79A (0.73 J $\mu\text{g/l}$). No other TCE breakdown products were detected above laboratory reporting limits in any wells.
- Iron was detected above the laboratory reporting limit of 100 $\mu\text{g/l}$ in the unfiltered samples from wells MW-1, MW-10 and MW-75 at concentrations ranging from 129 $\mu\text{g/l}$

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TABLE 1 SECTION 5

SUMMARY OF TCE CONCENTRATIONS IN GROUNDWATER (JUL. 2001-JAN. 2004)

Well	October 15-17, 2002	January 29-30, 2003	April 14-16, 2003	July 22-24, 2003	October 28-30, 2003	Jan. 21-22, 2004
MW1	<0.15	<0.15	<0.19	<0.19	<0.19	<0.19
MW10	6.8	3.9	<0.19	<0.19	5.8	3.0
MW12S	1.7	1.6	<0.19	<0.19	1.3	1.3
MW12D	-	-	<0.19	-	-	-
MW13	<0.15	<0.15	<0.19	<0.19	<0.19	<0.19
MW15	0.59	2.2	1.3	<0.19	0.67 J	0.96 J
MW23	-	-	<0.19	-	-	-
MW25	3.4	2.5	1.5	1.1	0.86 J	<0.19
B31 (MW27)	6.6	24.4	26.1	15.7	10.7	10.0
B32 (MW28)	-	-	3.4	-	-	-
B53	-	-	10.3	-	-	-
B54	-	-	75.4	-	-	-
B59	<0.15	0.62 J	0.71 J	0.96 J	<0.19	<0.19
B66	-	-	37.7	-	-	-
B71	-	-	1.2	-	-	-
MW75	<0.15/<0.15	<0.15/<0.15	<0.19/<0.19	<0.19/<0.19	<0.19/<0.19	<0.19/<0.19
MW76	<0.15	0.39 J	<0.19	<0.19	<0.19	<0.19
MW77	1.9	2.3	1.9	0.67 J	1.7	1.4
MW78	1.0	1.7	1.8	1.1	1.4	1.3
MW79A	3.7	6.4	3.8	<0.19	6.0	5.4
MW80	<0.15	<0.15	<0.19	<0.19	<0.19	<0.19
MW81	0.53	0.50 J	<0.19	<0.19	<0.19	<0.19
GAC Influent	7.6	5.6	9.91	20.22	7.6	4.5
GAC Effluent	<0.26	<0.26	<0.26	<0.26	<0.5	<0.5
GAC Mid-Vessel	<0.26	<0.26	0.37	<0.26	<0.5	<0.5

Notes:

All samples analyzed by USEPA Method 624, 601 or 502.2/524.2.

All concentrations are presented in micrograms per liter (mg/l).

- = Not analyzed J = Estimated concentration

Values in **bold** font exceed the site specific Groundwater Quality Criteria for TCE (1.0 mg/l).

Table 1, Section 5 Continued...

Well	July 23-25, 2001	October 16-17, 2001	January 21-23, 2002	April 8-10, 2002	May 1, 2002	July 17-19, 2002
MW1	<0.30	<0.30	<0.30	<0.30	-	<0.15
MW10	11.6/12.0	9.6/8.8	2.6/2.7	8.6/8.5	-	6.4
MW12S	1.8	1.4	1.4	1.4	-	1.8
MW12D	-	-	-	6.0	-	-
MW13	<0.30	<0.30	<0.30	<0.30	-	<0.15
MW15	1.2	0.83	1.3	1.9	-	1.3
MW23	-	-	-	61.7	-	-
MW25	17.6	14.0	9.0	6.4	-	4.1
B31 (MW27)	15.7	13.0	11.1	10.8	-	1.8
B32 (MW28)	-	-	-	13.7	-	-
B53	-	-	-	6.2	-	-
B54	-	-	-	87.4	-	-
B59	2.2	1.3	1.3	0.90	-	0.60
B66	-	-	-	41.0	-	-
B70A	-	-	-	<0.30	-	-
B71	-	-	-	0.47	-	-
MW75	<0.30	<0.30	<0.30/<0.30	<0.30/<0.30	<0.30	<0.15/<0.15
MW76	0.46	0.42	<0.30	0.45	0.41	<0.15
MW77	2.9	2.8	2.5	2.3	2.2	2.5
MW78	1.2	1.2	1.4	1.3	1.2	1.6
MW79A	2.9	3.1	3.8	3.8	4.3	6.0
MW80	<0.30	<0.30	<0.30	<0.30	-	<0.15
MW81	0.61	0.38	0.48	0.47	-	0.62
GAC Influent	16.0	15.0	11.0	11.0	-	8.7
GAC Effluent	< 0.49	<0.49	<0.49	<0.26	-	<0.26
GAC Mid-Vessel	< 0.49	<0.49	<0.49	<0.26	-	1.0

Notes:

All samples analyzed by USEPA Method 624, 601 or 502.2/524.2.

All concentrations are presented in micrograms per liter (mg/l).

- = Not analyzed J = Estimated concentration

Values in **bold** font exceed the site specific Groundwater Quality Criteria for TCE (1.0 mg/l).

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TABLE 2 SECTION 5

TCE AND ASSOCIATED BREAKDOWN PRODUCT CONCENTRATIONS, JANUARY 21-22, 2004

Well	TCE	cis-DCE	trans-DCE	1,1 DCE	Vinyl Chloride
MW-1	<0.19 ✓	< 0.20 ✓	< 0.53 ✓	< 0.43 ✓	< 0.67 ✓
MW-10	3.0 ✓	< 0.20 ✓	< 0.53 ✓	< 0.43 ✓	< 0.67 ✓
MW-12S	1.3 ✓	< 0.20 ✓	< 0.53 ✓	< 0.43 ✓	< 0.67 ✓
MW-13	<0.19 ✓	< 0.20 ✓	< 0.53 ✓	< 0.43 ✓	< 0.67 ✓
MW-15	0.96 J ✓	< 0.20 ✓	< 0.53 ✓	< 0.43 ✓	< 0.67 ✓
MW-25	<0.19 ✓	< 0.20 ✓	< 0.53 ✓	< 0.43 ✓	< 0.67 ✓
B-31	10.0 ✓	< 0.20 ✓	< 0.53 ✓	< 0.43 ✓	< 0.67 ✓
B-59	<0.19 ✓	< 0.20 ✓	< 0.53 ✓	< 0.43 ✓	< 0.67 ✓
MW-75	<0.19 ✓	< 0.20 ✓	< 0.53 ✓	< 0.43 ✓	< 0.67 ✓
MW-85 (Dup MW-75)	<0.19 ✓	< 0.20 ✓	< 0.53 ✓	< 0.43 ✓	< 0.67 ✓
MW-76	<0.19 ✓	< 0.20 ✓	< 0.53 ✓	< 0.43 ✓	< 0.67 ✓
MW-77	1.4 ✓	0.89 J ✓	< 0.53 ✓	< 0.43 ✓	< 0.67 ✓
MW-78	1.3 ✓	< 0.20 ✓	< 0.53 ✓	< 0.43 ✓	< 0.67 ✓
MW-79A	5.4 ✓	3.3 ✓	0.73 J ✓	< 0.43 ✓	< 0.67 ✓
MW-80	<0.19 ✓	< 0.20 ✓	< 0.53 ✓	< 0.43 ✓	< 0.67 ✓
MW-81	<0.19 ✓	< 0.20 ✓	< 0.53 ✓	< 0.43 ✓	< 0.67 ✓

Notes:

All concentrations are presented in micrograms per liter (µg/l).

J = Estimated concentration.

Values in **bold** exceed the site specific Groundwater Quality Criteria for TCE (1.0 µg/l).

LENOX CHINA FACILITY AND ADJACENT AREAS
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TABLE 3 SECTION 5

INORGANIC ANALYTE CONCENTRATIONS, JANUARY 21-22, 2004

Well No.	MW-1	MW-10	MW-12S	MW-13	MW-15	MW-25	B-31	B-59
Metals (µg/l)								
Iron (Unfiltered)	669 ✓	1,780 ✓	<100 ✓	<100 ✓	<100 ✓	<100 ✓	<100 ✓	<100 ✓
Iron (Filtered)	<100 ✓	<100 ✓	<100 ✓	<100 ✓	<100 ✓	<100 ✓	<100 ✓	<100 ✓
Lead (Unfiltered)	<3.0 ✓	6.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓
Lead (Filtered)	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓
Zinc (Unfiltered)	<20 ✓	<20 ✓	<20 ✓	<20 ✓	97.3 ✓	104 ✓	69.9 ✓	<20 ✓
Zinc (Filtered)	<20 ✓	<20 ✓	20.2 ✓	<20 ✓	98.9 ✓	103 ✓	68.3 ✓	<20 ✓
TDS (mg/l)	79.0 ✓	182 ✓	140 ✓	123 ✓	146 ✓	86.0 ✓	100 ✓	80.0 ✓
TSS (mg/l)	9.0 ✓	96.0 ✓	<4.0 ✓	<4.0 ✓	<4.0 ✓	<4.0 ✓	<4.0 ✓	<4.0 ✓

Notes:

µg/l = Micrograms per liter.

mg/l = Milligrams per liter.

Values in **bold** exceed the site specific Groundwater Quality Criteria for Lead (10 µg/l) and Zinc (36.7 µg/l).

Table 3, Section 5 Continued . . .

Well No.	MW-75	MW-85*	MW-76	MW-77	MW-78	MW-79A	MW-80	MW-81
Metals (µg/l)								
Iron (Unfiltered)	129 ✓	119 ✓	<100 ✓	<100 ✓	<100 ✓	<100 ✓	<100 ✓	<100 ✓
Iron (Filtered)	<100 ✓	<100 ✓	<100 ✓	<100 ✓	<100 ✓	<100 ✓	<100 ✓	<100 ✓
Lead (Unfiltered)	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓
Lead (Filtered)	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓
Zinc (Unfiltered)	<20 ✓	<20 ✓	20.6 ✓	<20 ✓	<20 ✓	23.3 ✓	<20 ✓	<20 ✓
Zinc (Filtered)	<20 ✓	<20 ✓	26.5 ✓	20.5 ✓	<20 ✓	<20 ✓	<20 ✓	<20 ✓
TDS (mg/l)	23.0 ✓	51.0 ✓	126 ✓	36.0 ✓	26.0 ✓	89.0 ✓	80.0 ✓	37.0 ✓
TSS (mg/l)	<4.0 ✓	<4.0 ✓	<4.0 ✓	<4.0 ✓	<4.0 ✓	<4.0 ✓	<4.0 ✓	<4.0 ✓

Notes:

* MW-85 is duplicate of MW-75.

µg/l = Micrograms per liter.

mg/l = Milligrams per liter.

Values in **bold** exceed the site specific Groundwater Quality Criteria for Lead (10 µg/l) and Zinc (36.7 µg/l).

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TABLE 4 SECTION 5

QUALITY ASSURANCE/QUALITY CONTROL SAMPLES, JANUARY 21-22, 2004

Sample ID Sample Matrix Date	FB Field Blank 1/22/2004	FB-1 Field Blank 1/21/2004	FB-2 Field Blank 1/21/2004	TB Trip Blank
Trichloroethene	<0.19 ✓	<0.19 ✓	<0.19 ✓	<0.19
Iron (Unfiltered)	<100	<100 ✓	<100 ✓	NA
Iron (Filtered)	<100	<100	<100	NA
Lead (Unfiltered)	<3.0	<3.0 ✓	<3.0 ✓	NA
Lead (Filtered)	<3.0	<3.0	<3.0	NA
Zinc (Unfiltered)	<20	<20 ✓	<20 ✓	NA
Zinc (Filtered)	<20	<20	<20	NA
TDS (mg/l)	<10	<10 ✓	<10 ✓	NA
TSS (mg/l)	<4.0	<4.0 ✓	<4.0 ✓	NA

Notes:

All concentrations presented in micrograms per liter (µg/l), unless otherwise noted.

mg/l = Milligrams per liter.

NA = Not Analyzed

(MW-75) to 1,780 µg/l (MW-10). Iron was not detected above the laboratory reporting limit of 100 µg/l in any filtered sample.

- Lead was detected above the laboratory reporting limit of 3.0 µg/l only in the unfiltered sample from well MW-10 at a concentration of 6.0 µg/l. Lead was not detected above the laboratory reporting limit of 3.0 µg/l in any filtered sample.
- Zinc was detected above the laboratory reporting limit of 20 µg/l in the unfiltered samples from wells MW-15, MW-25, B-31, MW-76 and MW-79A at concentrations ranging from 20.6 µg/l (MW-76) to 104 µg/l (MW-25). Zinc was detected above the laboratory reporting limit of 20 µg/l in the filtered samples from wells MW-12S, MW-15, MW-25, B-31, MW-76 and MW-77 at concentrations ranging from 20.2 µg/l (MW-12S) to 103 µg/l (MW-25).
- TDS concentrations ranged from 23 mg/l (MW-75) to 182 mg/l (MW-10). TSS concentrations were less than the laboratory reporting limit of 4.0 mg/l in all samples except MW-1 (9.0 mg/l) and MW-10 (96.0 mg/l).
- There was fair agreement between analyte concentrations in the field and duplicate samples (MW-85) from well MW-75.
- TCE, iron, lead, zinc, TDS and TSS were not detected in the field blank samples at concentrations exceeding their respective laboratory reporting limits. No VOCs were detected in the trip blank at concentrations exceeding laboratory reporting limits.
- Chloroform was detected in the samples from a number of wells, at concentrations ranging from 1.2 µg/l (MW-13) to 3.1 µg/l (MW-79A and MW-81). Chloroform was not detected in the field or trip blanks and is not considered a site-related compound.

The monitoring data indicates that since the last monitoring round, TCE concentrations in samples from the sentinel wells along White Horse Pike decreased in wells MW-77, MW-78 and

MW-79[✓]A, and remained the same in wells MW-75 and MW-76 at less than the laboratory reporting limit. The greatest change in concentration occurred at well MW-79[✓]A, which decreased from 6.0[✓] µg/l in October 2003 to 5.4[✓] µg/l in January 2004.

6.0 SOLID WASTE MANAGEMENT UNIT NO. 2 AND AREA OF CONCERN GROUNDWATER MONITORING PROGRAM (MOA)

The groundwater sampling data from monitoring wells MW-10, MW-17, MW-72, MW-73 and MW-74 are used to assess groundwater quality downgradient of Solid Waste Management Unit (SWMU) No. 2 and the Area of Concern (AOC). Unfiltered and filtered samples from these wells were analyzed for lead and zinc. The groundwater analytical data is summarized in Table 1, Section 6. The laboratory data reports are included in Appendix C.

The January 2004 monitoring results are summarized below:

- Lead was detected in the unfiltered samples from wells MW-10 (6.0 µg/l), MW-72 (11.3 µg/l), MW-73 (16.1 µg/l) and MW-74 (3.8 µg/l) at concentrations exceeding the laboratory reporting limit of 3.0 µg/l. Lead was not detected in any of the filtered samples at a concentrations exceeding the laboratory reporting limit of 3.0 µg/l.
- Zinc was detected in the unfiltered samples from wells MW-17 (114 µg/l), MW-72 (23.3 µg/l), MW-73 (59.6 µg/l) and MW-74 (83.0 µg/l) at concentrations exceeding the laboratory reporting limit of 20 µg/l. Zinc was detected in the filtered samples from wells MW-17 (118 µg/l), MW-73 (46.6 µg/l) and MW-74 (82.2 µg/l) at concentrations exceeding the laboratory reporting limit of 20 µg/l.

**LENOX CHINA FACILITY AND ADJACENT AREAS
POMONA, NEW JERSEY**

TABLE 1 SECTION 6

SWMU NO. 2 AND AOC GROUNDWATER MONITORING RESULTS, JANUARY 21-22, 2004

Well No.	MW-10	MW-17	MW-72	MW-73	MW-74
Lead (Unfiltered)	6.0 ✓	<3.0 ✓	11.3 ✓	16.1 ✓	3.8 ✓
Lead (Filtered)	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓
Zinc (Unfiltered)	<20 ✓	114 ✓	23.3 ✓	59.6 ✓	83.0 ✓
Zinc (Filtered)	<20 ✓	118 ✓	<20 ✓	46.6 ✓	82.2 ✓

Notes:

All concentrations presented in micrograms per liter (µg/l).

Values in **bold** exceed the site specific Groundwater Quality Criteria for Lead (10 µg/l) and Zinc (36.7 µg/l).

7.0 CLASSIFICATION EXCEPTION AREA/ STATISTICAL ANALYSIS PROGRAM (MOA)

The groundwater sampling data from MW-1, MW-3F, MW-6F, MW-12S, MW-13, MW-73, MW-74, MW-75 and MW-79A is used to assess groundwater quality downgradient of the Lenox facility. Unfiltered and filtered samples from these wells were analyzed for lead and zinc. The groundwater analytical results are summarized in Table 1, Section 7. The laboratory data reports are included in Appendix C.

The January 2004 results for the Classification Exception Area (CEA) monitoring program are summarized below:

- Lead concentrations in the unfiltered samples ranged from less than the laboratory reporting limit of 3.0 $\mu\text{g/l}$ to 16.1 $\mu\text{g/l}$ (MW-73). Lead concentrations in the filtered samples were all less than the laboratory reporting limit of 3.0 $\mu\text{g/l}$.
- Zinc concentrations in the unfiltered samples ranged from less than the laboratory reporting limit of 20 $\mu\text{g/l}$ to 83.0 $\mu\text{g/l}$ (MW-74). Zinc concentrations in the filtered samples ranged from less than the laboratory reporting limit of 20 $\mu\text{g/l}$ to 82.2 $\mu\text{g/l}$ (MW-74).
- TCE concentrations in all monitoring wells, as summarized in Table 1, Section 5, ranged from less than the laboratory reporting limit of 0.19 $\mu\text{g/l}$ to 10.0 $\mu\text{g/l}$, with the highest concentration in the sample from well B-31. TCE concentrations in the sentinel wells along the White Horse Pike ranged from less than the 0.19 $\mu\text{g/l}$ laboratory reporting limit in wells MW-75 and MW-76 to 5.4 $\mu\text{g/l}$ in well MW-79A.

In accordance with the CEA monitoring program, the sentinel well TCE monitoring data collected during the past eight consecutive quarters was statistically analyzed using the Mann-Whitney U-Test. The results are summarized in Table 2, Section 7. The null hypothesis was accepted at the 90 percent confidence level ($U > 3$) for four wells (MW-75, MW-76, MW-78 and MW-79A) indicating that TCE concentrations at these wells have statistically remained the same

or increased over the past eight monitoring periods. MW-75 has not contained any detectable concentrations of TCE for the past eighteen consecutive quarters. The null hypothesis was rejected ($U \leq 3$) for well MW-77, indicating that the TCE concentration at this well has statistically decreased over the past eight monitoring periods.

**LENOX CHINA FACILITY AND ADJACENT AREAS
POMONA, NEW JERSEY**

TABLE 1 SECTION 7

CEA GROUNDWATER MONITORING RESULTS, JANUARY 21-22, 2004

Well No.	MW-1	MW-3F	MW-6F	MW-12S	MW-13
Lead (Unfiltered)	<3.0 ✓	3.8 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓
Lead (Filtered)	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0	<3.0 ✓
Zinc (Unfiltered)	<20 ✓	<20 ✓	<20 ✓	<20 ✓	<20 ✓
Zinc (Filtered)	<20 ✓	<20 ✓	<20 ✓	20.2	<20 ✓

Well No.	MW-73	MW-74	MW-75	MW-79A
Lead (Unfiltered)	16.1 ✓	3.8 ✓	<3.0 ✓	<3.0 ✓
Lead (Filtered)	<3.0 ✓	<3.0 ✓	<3.0 ✓	<3.0 ✓
Zinc (Unfiltered)	59.6 ✓	83.0 ✓	<20 ✓	23.3 ✓
Zinc (Filtered)	46.6 ✓	82.2 ✓	<20 ✓	<20 ✓

Notes:

All concentrations presented in micrograms per liter (µg/l).

Values in **bold** exceed the site specific Groundwater Quality Criteria for Lead (10 µg/l) and Zinc (36.7 µg/l).

**LENOX CHINA FACILITY AND ADJACENT AREAS
POMONA, NEW JERSEY**

TABLE 2 SECTION 7

MANN-WHITNEY STATISTICAL TEST SUMMARY

Sentinel Well	Eighth Quarter Ending Date					
	Oct-03			Jan-04		
	Ua	Ub	U	Ua	Ub	U
MW-75	16	0	8	16	0	8
MW-76	12	3	7.5	8	0	4
MW-77	3	1	2	1	0	0.5
MW-78	12	11	11.5	9	8	8.5
MW-79A	11	8	9.5	7	5	6

Notes:

Null hypothesis will be accepted at the 90% confidence level
when the calculated U value is greater than 3.

If two or more concentrations are identical the test is calculated twice,
once ranking the identical "a" concentrations first (Ua) and once
ranking the "b" concentrations first (Ub). The average of these values
is the actual "U". (N.J.A.C. 7:26 E App. C)

8.0 RESIDENTIAL WELL SAMPLING

Following discussions with NJDEP and USEPA in 2001, Lenox agreed to develop and coordinate a sampling program with the Atlantic County Health Services (ACDPH) to assess and track TCE and breakdown product concentrations at residential wells located downgradient of the White Horse Pike (Route 30). Lenox initiated the sampling during the fourth quarter of 2001 at the first three homes immediately downgradient of the White Horse Pike that are not served by public water. A fourth residence was added in January 2003 and is included in the list below. In accordance with the plan developed by Lenox, the sampling results are provided to ACDPH, which in turn provides any significant data directly to the homeowners and the USEPA.

The residences covered by the current quarterly sampling program are shown on Figure 5 and are identified as follows:

- RESW-1, 360 S. Mannheim Avenue
- RESW-2, 357 S. Mannheim Avenue
- RESW-3, 353 S. Mannheim Avenue
- RESW-4, 344 S. Mannheim Avenue

Private wells at homes further north and west of Mannheim Avenue are not included in the sampling program due to their distance from White Horse Pike. The wells were sampled on January 21, 2004. Please note that RESW-3 was not sampled during this round. The property was recently sold and ACDPH had not yet informed the new owner of the monitoring program when the sampling event took place.

The current and historical sampling data is summarized in Tables 1 and 2, Section 8. Laboratory data reports are included in Appendix C. The first quarter monitoring results are summarized below:

- TCE was detected at a concentration above the laboratory reporting limit of 0.50 µg/l in RESW-1 (0.54 µg/l). TCE was not detected in the other two samples. TCE breakdown

products were not detected in any sample at concentrations exceeding the laboratory reporting limits.

- Chloroform was detected in two samples at concentrations of 6.5 µg/l (RESW-1) and 0.49 µg/l (RESW-2). Chloroform is not considered a site-related compound.
- Methyl tert-butyl ether (MTBE) was detected in the sample from RESW-4 at a concentration of 1.8 µg/l. MTBE is not considered a site-related compound.
- Benzene was detected in the sample from RESW-2 at concentrations of 0.60 µg/l. Benzene is not considered to be site-related compounds.

The RESW-1 residence was connected to the municipal water supply system on August 20, 2002.

LENOX CHINA
POMONA, NEW JERSEY

TABLE 1 SECTION 8

RESIDENTIAL WELL SAMPLING RESULTS, JANUARY 21, 2004

Well ID	RESW-1	RESW-2	RESW-4
Acetone	-	-	-
2-Butanone	-	-	-
Benzene	-	0.60 ✓	-
Bromobenzene	-	-	-
Bromochloromethane	-	-	-
Bromodichloromethane	-	-	-
Bromoform	-	-	-
Bromomethane	-	-	-
n-Butylbenzene	-	-	-
sec-Butylbenzene	-	-	-
tert-Butylbenzene	-	-	-
Carbon disulfide	-	-	-
Chlorobenzene	-	-	-
Chloroethane	-	-	-
Chloroform	6.5 ✓	0.49 J ✓	-
Chloromethane	-	-	-
o-Chlorotoluene	-	-	-
p-Chlorotoluene	-	-	-
Carbon tetrachloride	-	-	-
1,1-Dichloroethane	-	-	-
1,1-Dichloroethene	-	-	-
1,1-Dichloropropene	-	-	-
1,2-Dibromo-3-chloropropane	-	-	-
1,2-Dibromoethane	-	-	-
1,2-Dichloroethane	-	-	-
1,2-Dichloropropane	-	-	-
1,3-Dichloropropane	-	-	-
2,2-Dichloropropane	-	-	-
Dibromochloromethane	-	-	-
Dibromomethane	-	-	-
Dichlorodifluoromethane	-	-	-
Cis-1,3-Dichloropropene	-	-	-
m-Dichlorobenzene	-	-	-
o-Dichlorobenzene	-	-	-
p-Dichlorobenzene	-	-	-
Trans-1,2-Dichloroethene	-	-	-
Cis-1,2-Dichloroethene	-	-	-
Trans-1,3-Dichloropropene	-	-	-
Ethylbenzene	-	-	-
Hexachlorobutadiene	-	-	-
Hexane	-	-	-
2-Hexanone	-	-	-
Isopropylbenzene	-	-	-
p-Isopropylbenzene	-	-	-
Methylene Chloride	-	-	-
Methyl Tert Butyl Ether	-	-	1.8 ✓
4-Methyl-2-Pentanone	-	-	-
Naphthalene	-	-	-
n-Propylbenzene	-	-	-
Styrene	-	-	-
1,1,1,2-Tetrachloroethane	-	-	-
1,1,1-Trichloroethane	-	-	-
1,1,2,2-Tetrachloroethane	-	-	-
1,1,2-Trichloroethane	-	-	-
1,2,3-Trichlorobenzene	-	-	-
1,2,3-Trichloropropane	-	-	-
1,2,4-Trichlorobenzene	-	-	-
1,2,4-Trimethylbenzene	-	-	-
1,3,5-Trimethylbenzene	-	-	-
Toluene	-	-	-
Trichloroethene	0.54 ✓	-	-
Trichlorofluoromethane	-	-	-
Vinyl Chloride	-	-	-
Xylenes, total	-	-	-

Notes:

All concentrations presented in micrograms per liter (ug/l).
- = Parameter not detected above laboratory detection limit.

**LENOX CHINA
POMONA, NEW JERSEY**

TABLE 2 SECTION 8

HISTORICAL RESIDENTIAL WELL SAMPLING RESULTS AS OF JAN. 2004
(DETECTED COMPOUNDS ONLY)

Sample ID	Date	Benzene	Chloroform	Chlorobenzene	m-Dichloro benzene	p-Dichloro benzene	MTBE	Trichloroethene
RESW-1	3/19/2002	-	5.0	-	-	-	-	1.4
	5/16/2002	-	3.6	-	-	-	-	1.5
	7/18/2002	-	4.1	-	-	-	-	1.2
	10/16/2002	-	4.2	-	-	-	0.29	0.88
	1/29/2003	-	6.6	-	-	-	-	-
	4/14/2003	-	4.9	-	-	-	-	0.56
	7/23/2003	-	5.5	-	-	-	-	1.1
	10/30/2003	-	7.9	-	-	-	-	0.53
	1/21/2004	-	6.5 ✓	-	-	-	-	0.54 ✓
RESW-2	3/19/2002	1.3	0.72	-	-	0.26	-	-
	5/16/2002	0.88	0.51	-	-	0.33	-	-
	7/18/2002	0.96	0.38	-	-	0.38	-	-
	10/16/2002	1.4	0.29	-	0.071	0.33	-	-
	1/29/2003	1.4	0.25 J	-	-	0.26 J	-	-
	4/14/2003	1.4	0.28 J	0.098 J	0.10 J	0.52	-	-
	7/23/2003	0.78	-	-	-	-	-	-
	10/30/2003	0.52	0.68	-	-	0.31 J	-	-
	1/21/2004	0.60 ✓	0.49 J ✓	-	-	-	-	-
RESW-3	3/19/2002	-	3.1	-	-	-	-	-
	6/4/2002	-	2.7	-	-	-	-	-
	7/18/2002	-	2.6	-	-	-	-	-
	10/16/2002	-	2.4	-	-	-	-	-
	1/29/2003	NS	NS	NS	NS	NS	NS	NS
	4/16/2003	-	2.4	-	-	-	-	-
	7/23/2003	-	2.9	-	-	-	-	-
	10/30/2003	NS	NS	NS	NS	NS	NS	NS
	1/21/2004	NS	NS	NS	NS	NS	NS	NS
RESW-4	1/29/2003	-	0.29 J	-	-	-	1.3	-
	4/14/2003	-	0.22 J	-	-	-	1.3	-
	7/23/2003	-	-	-	-	-	1.7	-
	10/30/2003	-	-	-	-	-	2.3	-
	1/21/2004	-	-	-	-	-	1.8 ✓	-

Notes:

All concentrations presented in micrograms per liter (ug/l).

- = Not detected above laboratory detection limit.

J = Estimated concentration. NS = Not sampled.

Values in **bold** font exceed the site specific Groundwater Quality Criteria for TCE (1.0 ug/l).

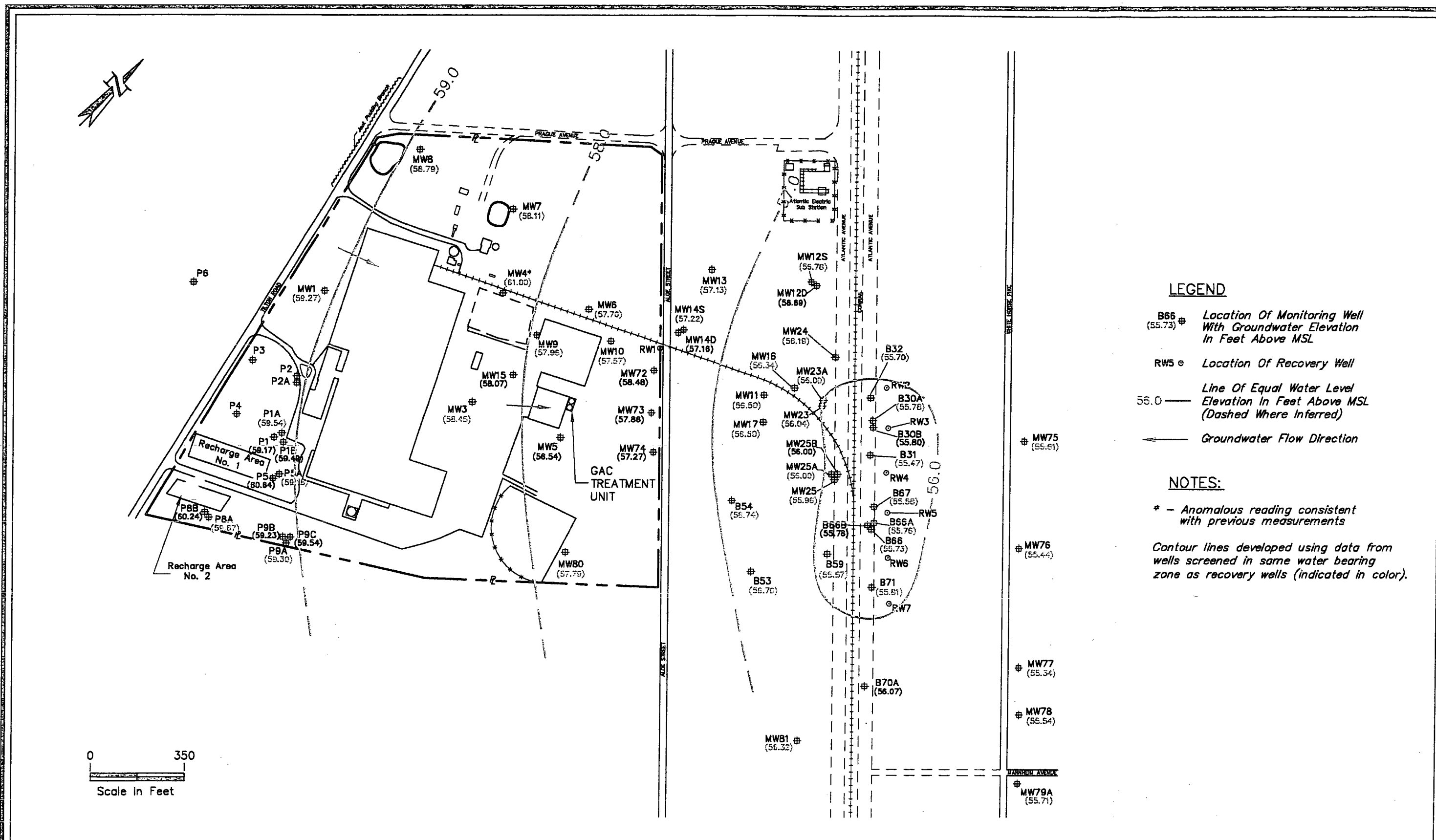
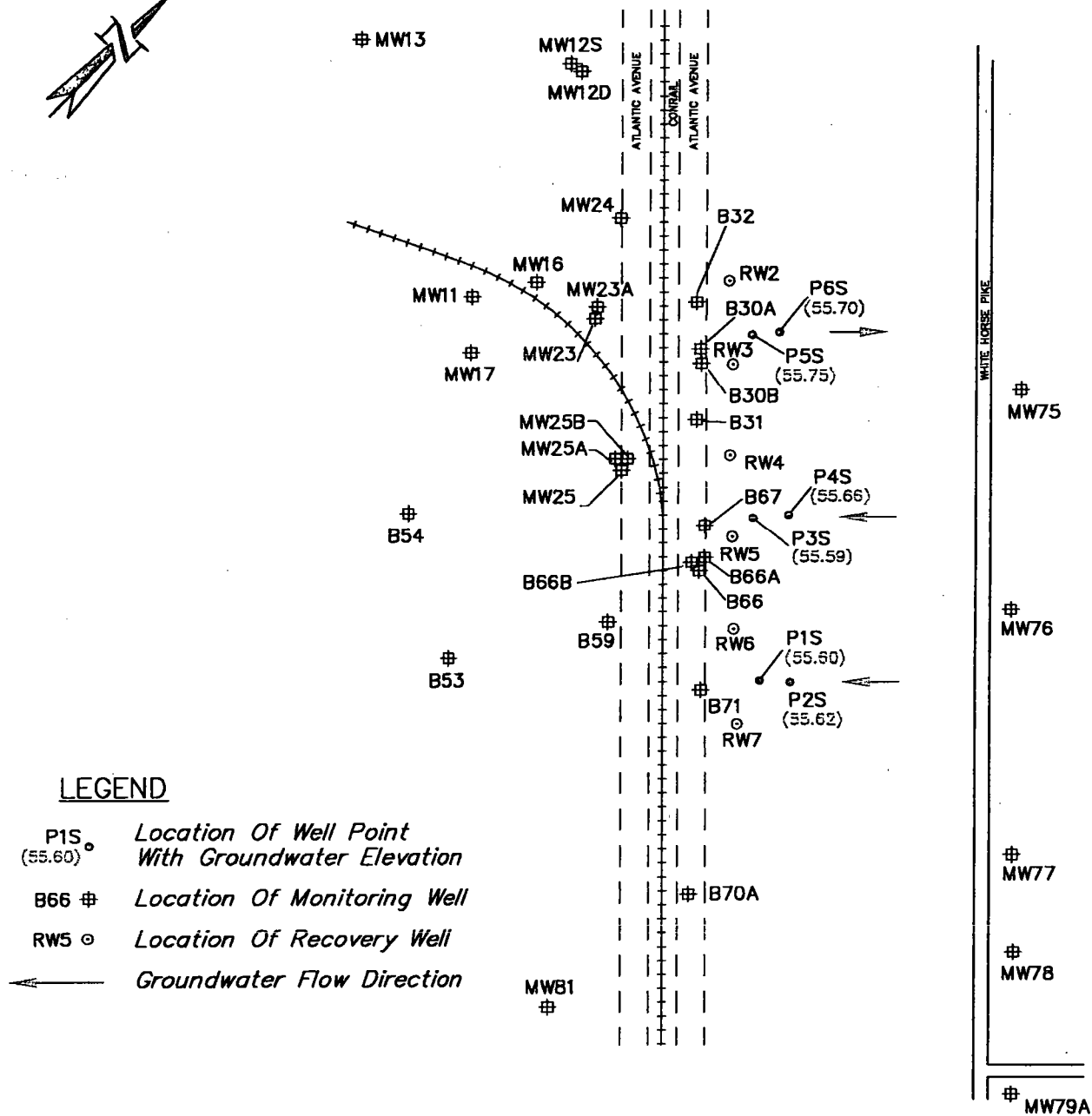


FIGURE NO: 1 GROUNDWATER FLOW MAP, JANUARY 20, 2004
 LENOX CHINA
 POMONA, NEW JERSEY

Source: Base Map Obtained From Geraghty & Miller's August 1992 Groundwater Monitoring Report



**FIGURE NO: 2 GROUNDWATER FLOW MAP, SHALLOW WELLS
JANUARY 20, 2004**

LENOX CHINA
POMONA, NEW JERSEY



Gannett Fleming
ENGINEERS AND PLANNERS
PRINCETON, NEW JERSEY



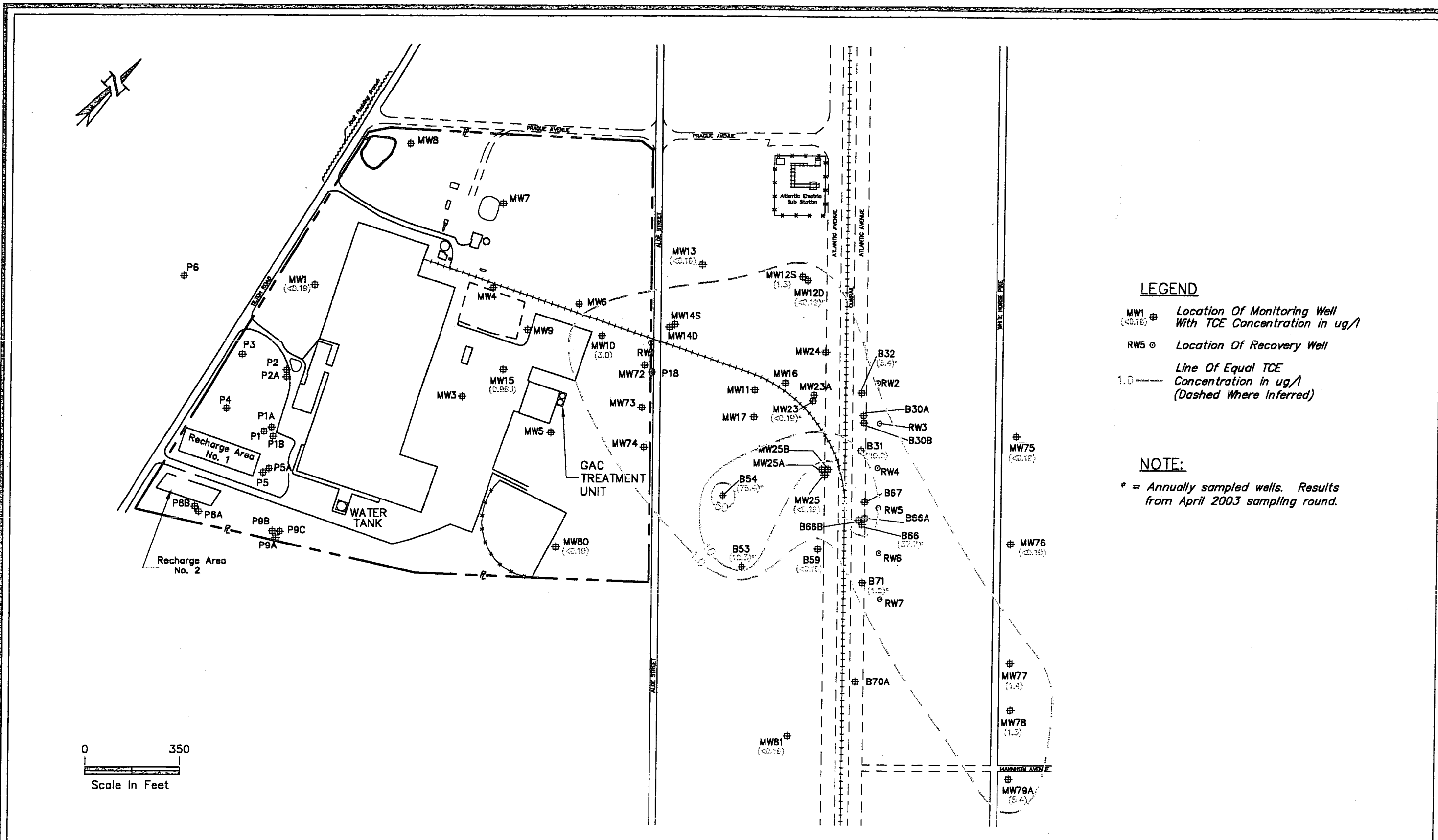


FIGURE NO: 4 EXTENT OF TRICHLOROETHYLENE IN GROUNDWATER, JANUARY 21-22, 2004
 LENOX CHINA
 POMONA, NEW JERSEY

Source: Base Map Obtained From Geraghty & Miller's August 1992 Groundwater Monitoring Report

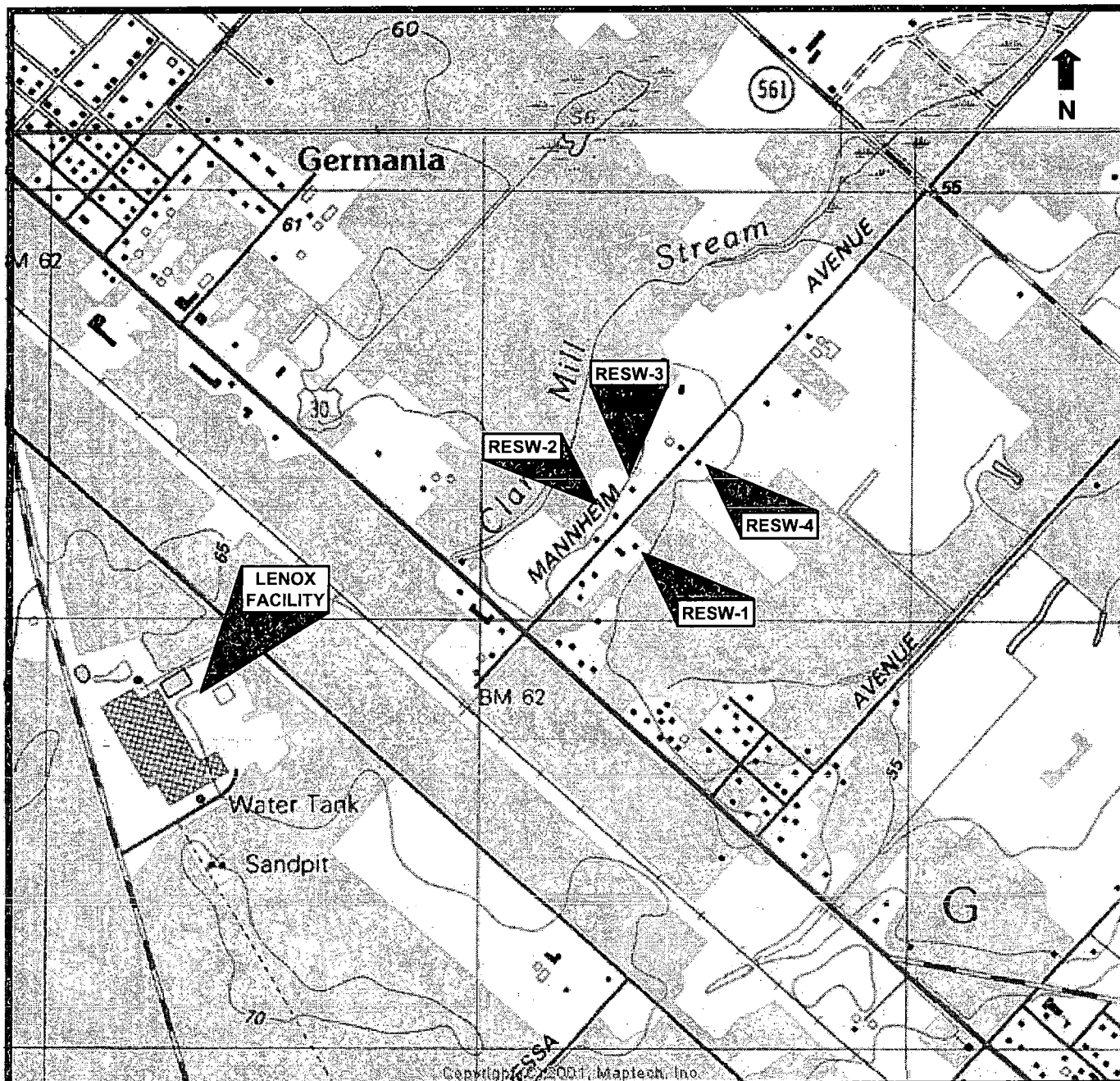


FIGURE NO: 5
RESIDENTIAL WELL SAMPLING LOCATIONS
LENOX CHINA
POMONA, NEW JERSEY

Approximate Scale: 1 inch = 1,200 feet

Source Map: USGS 7.5 Minute Series, Topo Map - Pleasantville, NJ 1989



Gannett Fleming

ENGINEERS AND PLANNERS
 PRINCETON, NEW JERSEY

APPENDIX A

WELL SAMPLING LOGS

WELL SAMPLING LOG

Gannett Fleming
202 Wall Street
Princeton, New Jersey 08540
(609) 279-9140 (Telephone)
(609) 279-9436 (Facsimile)

I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 42430.002

Project Name: TCE Quarterly Monitoring

Sampled By: RB/SK

Well No.: MW-3F

Well Use: Monitoring

Sample ID: MW-3F

Sample Date: 1/22/04

Sample Time: 8:40

II. Well Information:

PID Reading: -

Well Diameter: 2 inches

Static Depth to Water: 4.38 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 17.40 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 13.02 feet

Volume of Standing Water: 2.08 gallons

Volume to be removed: 6.30 gallons

Actual Volume removed: 6.50 gallons

III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other _____

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other _____

Pump Flow Rate: 0.5 gpm

Purge Start: 8:28

Purge Time: 12 min.

Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
8:32	2	4.17	0.119	7.1	8.1
8:35	4	4.12	0.121	6.0	7.8
8:38	6	4.09	0.120	6.3	7.8

Depth to water after purge: 4.40 ft. below m.p.

Time: 8:40

Depth to water prior to sampling: 4.40 ft. below m.p.

Time: 8:40

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other _____

Sample Odor: ☒ None

☐ Other _____

IV. Sample Analyses:

Sample Parameters: Metals

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 1/22/04

WELL SAMPLING LOG

Gannett Fleming
202 Wall Street
Princeton, New Jersey 08540
(609) 279-9140 (Telephone)
(609) 279-9436 (Facsimile)

I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 42430.002

Project Name: TCE Quarterly Monitoring

Sampled By: RB/SK

Well No.: MW-6F

Well Use: Monitoring

Sample ID: MW-6F

Sample Date: 1/22/04

Sample Time: 9:09

II. Well Information:

PID Reading: -

Well Diameter: 2 inches

Static Depth to Water: 13.87 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 23.87 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 10.00 feet

Volume of Standing Water: 1.60 gallons

Volume to be removed: 4.80 gallons

Actual Volume removed: 5.00 gallons

III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other _____

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other _____

Pump Flow Rate: 0.7 gpm

Purge Start: 9:02

Purge Time: 7 min.

Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
9:03	1.5	3.80	0.126	9.3	11.1
9:05	3.0	3.92	0.123	8.4	11.9
9:07	4.5	4.00	0.124	8.6	12.0

Depth to water after purge: 13.95 ft. below m.p.

Time: 9:09

Depth to water prior to sampling: 13.95 ft. below m.p.

Time: 9:09

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other _____

Sample Odor: ☒ None

☐ Other _____

IV. Sample Analyses:

Sample Parameters: Metals

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 1/22/04

WELL SAMPLING LOG

Gannett Fleming
202 Wall Street
Princeton, New Jersey 08540
(609) 279-9140 (Telephone)
(609) 279-9436 (Facsimile)

I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 42430.002

Project Name: TCE Quarterly Monitoring

Sampled By: RB/SK

Well No.: MW-12S

Well Use: Monitoring

Sample ID: MW-12S

Sample Date: 1/21/04

Sample Time: 11:01

II. Well Information:

PID Reading: -

Well Diameter: 2 inches

Static Depth to Water: 5.84 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 66.00 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 60.16 feet

Volume of Standing Water: 9.63 gallons

Volume to be removed: 28.89 gallons

Actual Volume removed: 30.00 gallons

III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other _____

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other _____

Pump Flow Rate: 3.8 gpm

Purge Start: 10:53

Purge Time: 8 min.

Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
10:55	10	4.08	0.189	1.4	12.1
10:58	20	4.07	0.188	2.1	12.3
11:00	30	4.08	0.187	2.0	12.3

Depth to water after purge: 5.88 ft. below m.p.

Time: 11:01

Depth to water prior to sampling: 5.88 ft. below m.p.

Time: 11:01

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other _____

Sample Odor: ☒ None

☐ Other _____

IV. Sample Analyses:

Sample Parameters: Voc, Metals, TDS, TSS

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 1/22/04

WELL SAMPLING LOG

Gannett Fleming
202 Wall Street
Princeton, New Jersey 08540
(609) 279-9140 (Telephone)
(609) 279-9436 (Facsimile)

I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 42430.002

Project Name: TCE Quarterly Monitoring

Sampled By: RB/SK

Well No.: MW-13

Well Use: Monitoring

Sample ID: MW-13

Sample Date: 1/21/04

Sample Time: 8:42

II. Well Information:

PID Reading: -

Well Diameter: 2 inches

Static Depth to Water: 7.53 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 61.40 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 53.87 feet

Volume of Standing Water: 8.62 gallons

Volume to be removed: 25.86 gallons

Actual Volume removed: 30.00 gallons

III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other _____

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other _____

Pump Flow Rate: 3.8 gpm

Purge Start: 8:34

Purge Time: 8 min.

Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
8:36	10	3.77	0.188	6.2	12.5
8:38	20	3.75	0.191	7.0	12.8
8:41	30	3.80	0.190	7.5	12.9

Depth to water after purge: 8.02 ft. below m.p.

Time: 8:42

Depth to water prior to sampling: 8.02 ft. below m.p.

Time: 8:42

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other _____

Sample Odor: ☒ None

☐ Other _____

IV. Sample Analyses:

Sample Parameters: Voc, Metals, TDS, TSS

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 1/22/04

WELL SAMPLING LOG

Gannett Fleming
202 Wall Street
Princeton, New Jersey 08540
(609) 279-9140 (Telephone)
(609) 279-9436 (Facsimile)

I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 42430.002

Project Name: TCE Quarterly Monitoring

Sampled By: RB/SK

Well No.: MW-15

Well Use: Monitoring

Sample ID: MW-15

Sample Date: 1/21/04

Sample Time: 11:25

II. Well Information:

PID Reading: -

Well Diameter: 2 inches

Static Depth to Water: 8.00 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 21.52 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 13.52 feet

Volume of Standing Water: 2.16 gallons

Volume to be removed: 6.48 gallons

Actual Volume removed: 15.00 gallons

III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other _____

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other _____

Pump Flow Rate: 3.0 gpm

Purge Start: 11:20

Purge Time: 5 min.

Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
11:21	5	4.46	0.212	7.2	14.1
11:22	10	4.51	0.211	8.4	14.6
11:24	15	4.46	0.211	7.4	14.9

Depth to water after purge: 8.10 ft. below m.p.

Time: 11:25

Depth to water prior to sampling: 8.10 ft. below m.p.

Time: 11:25

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other _____

Sample Odor: ☒ None

☐ Other _____

IV. Sample Analyses:

Sample Parameters: Voc, Metals, TDS, TSS

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 1/22/04

WELL SAMPLING LOG

Gannett Fleming
202 Wall Street
Princeton, New Jersey 08540
(609) 279-9140 (Telephone)
(609) 279-9436 (Facsimile)

I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 42430.002

Project Name: TCE Quarterly Monitoring

Sampled By: RB/SK

Well No.: MW-17

Well Use: Monitoring

Sample ID: MW-17

Sample Date: 1/21/04

Sample Time: 10:00

II. Well Information:

PID Reading: -

Well Diameter: 2 inches

Static Depth to Water: 5.59 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 66.00 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 60.41 feet

Volume of Standing Water: 9.67 gallons

Volume to be removed: 29.01 gallons

Actual Volume removed: 30.00 gallons

III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other _____

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other _____

Pump Flow Rate: 3.8 gpm

Purge Start: 9:52

Purge Time: 8 min.

Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
9:54	10	4.17	0.148	6.3	13.4
9:56	20	4.18	0.147	7.1	13.6
9:59	30	4.12	0.147	5.6	13.7

Depth to water after purge: 5.62 ft. below m.p.

Time: 10:00

Depth to water prior to sampling: 5.62 ft. below m.p.

Time: 10:00

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other _____

Sample Odor: ☒ None

☐ Other _____

IV. Sample Analyses:

Sample Parameters: Metals

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 1/22/04

WELL SAMPLING LOG

Gannett Fleming
202 Wall Street
Princeton, New Jersey 08540
(609) 279-9140 (Telephone)
(609) 279-9436 (Facsimile)

I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 42430.002

Project Name: TCE Quarterly Monitoring

Sampled By: RB/SK

Well No.: MW-25

Well Use: Monitoring

Sample ID: MW-25

Sample Date: 1/21/04

Sample Time: 10:20

II. Well Information:

PID Reading: -

Well Diameter: 2 inches

Static Depth to Water: 5.17 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 44.60 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 39.43 feet

Volume of Standing Water: 6.31 gallons

Volume to be removed: 18.93 gallons

Actual Volume removed: 25.00 gallons

III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other _____

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other _____

Pump Flow Rate: 4.2 gpm

Purge Start: 10:14

Purge Time: 6 min.

Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
10:16	10	4.08	0.128	6.3	13.1
10:18	20	4.11	0.127	6.7	13.2
10:19	25	4.09	0.127	6.5	13.2

Depth to water after purge: 5.25 ft. below m.p.

Time: 10:20

Depth to water prior to sampling: 5.25 ft. below m.p.

Time: 10:20

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other _____

Sample Odor: ☒ None

☐ Other _____

IV. Sample Analyses:

Sample Parameters: Voc, Metals, TDS, TSS

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 1/22/04

WELL SAMPLING LOG

Gannett Fleming
202 Wall Street
Princeton, New Jersey 08540
(609) 279-9140 (Telephone)
(609) 279-9436 (Facsimile)

I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 42430.002

Project Name: TCE Quarterly Monitoring

Sampled By: RB/SK

Well No.: B-31

Well Use: Monitoring

Sample ID: B-31

Sample Date: 1/21/04

Sample Time: 13:24

II. Well Information:

PID Reading: -

Well Diameter: 1.5 inches

Static Depth to Water: 6.72 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 66.00 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 59.28 feet

Volume of Standing Water: 5.34 gallons

Volume to be removed: 16.02 gallons

Actual Volume removed: 17.00 gallons

III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other _____

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other _____

Pump Flow Rate: 2.1 gpm

Purge Start: 13:16

Purge Time: 8 min.

Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
13:18	5	4.49	0.138	9.9	12.8
13:21	10	4.17	0.153	10.2	12.8
13:23	15	4.19	0.157	10.5	12.9

Depth to water after purge: 6.90 ft. below m.p.

Time: 13:24

Depth to water prior to sampling: 6.90 ft. below m.p.

Time: 13:24

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other _____

Sample Odor: ☒ None

☐ Other _____

IV. Sample Analyses:

Sample Parameters: Voc, Metals, TDS, TSS

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 1/22/04

**WELL SAMPLING
LOG**

Gannett Fleming
202 Wall Street
Princeton, New Jersey 08540
(609) 279-9140 (Telephone)
(609) 279-9436 (Facsimile)

I. General Information:Client Name: Lenox China, Pomona, NJProject No.: 42430.002Project Name: TCE Quarterly MonitoringSampled By: RB/SKWell No.: B-59Well Use: MonitoringSample ID: B-59Sample Date: 1/21/04Sample Time: 9:37**II. Well Information:**PID Reading: -Well Diameter: 1.5 inchesStatic Depth to Water: 4.45 ft. below m.p.Measuring Point (m.p.): PVC CasingTotal Well Depth: 48.00 ft. below m.p.Measuring Point (m.p.): PVC CasingΔ h: 43.55 feetVolume of Standing Water: 3.92 gallonsVolume to be removed: 11.76 gallonsActual Volume removed: 25.00 gallons**III. Sampling Information:**

Purging Method:

☒ Peristaltic Pump☐ Submersible Pump☐ Bailer☐ Other _____

Well Drawdown/Recovery:

☒ Good☐ Poor☐ Other _____Pump Flow Rate: 3.6 gpmPurge Start: 9:30Purge Time: 7 min.**Purge Chemistry:**

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
9:32	10	4.00	0.117	8.6	12.5
9:34	20	4.02	0.119	8.5	12.6
9:36	25	4.00	0.120	8.4	12.7

Depth to water after purge: 4.55 ft. below m.p.Time: 9:37Depth to water prior to sampling: 4.55 ft. below m.p.Time: 9:37Sample Appearance: ☐ Turbid☐ Slightly Turbid☒ Clear☐ Other _____Sample Odor: ☒ None☐ Other _____**IV. Sample Analyses:**Sample Parameters: Voc, Metals, TDS, TSS

Metals:

☒ Filtered☒ UnfilteredLaboratory: AccutestDate Shipped: 1/22/04

WELL SAMPLING LOG

Gannett Fleming
202 Wall Street
Princeton, New Jersey 08540
(609) 279-9140 (Telephone)
(609) 279-9436 (Facsimile)

I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 42430.002

Project Name: TCE Quarterly Monitoring

Sampled By: RB/SK

Well No.: MW-72

Well Use: Monitoring

Sample ID: MW-72

Sample Date: 1/21/04

Sample Time: 16:06

II. Well Information:

PID Reading: -

Well Diameter: 2 inches

Static Depth to Water: 5.71 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 15.50 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 9.79 feet

Volume of Standing Water: 1.57 gallons

Volume to be removed: 4.71 gallons

Actual Volume removed: 6.00 gallons

III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other _____

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other _____

Pump Flow Rate: 0.9 gpm

Purge Start: 15:59

Purge Time: 7 min.

Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
16:02	2	4.98	0.85	6.5	9.4
16:04	4	4.95	0.84	5.2	9.5
16:06	6	4.86	0.85	4.7	9.9

Depth to water after purge: 6.05 ft. below m.p.

Time: 16:06

Depth to water prior to sampling: 6.05 ft. below m.p.

Time: 16:06

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other _____

Sample Odor: ☒ None

☐ Other _____

IV. Sample Analyses:

Sample Parameters: Metals

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 1/22/04

WELL SAMPLING LOG

Gannett Fleming
202 Wall Street
Princeton, New Jersey 08540
(609) 279-9140 (Telephone)
(609) 279-9436 (Facsimile)

I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 42430.002

Project Name: TCE Quarterly Monitoring

Sampled By: RB/SK

Well No.: MW-73

Well Use: Monitoring

Sample ID: MW-73

Sample Date: 1/21/04

Sample Time: 16:29

II. Well Information:

PID Reading: -

Well Diameter: 2 inches

Static Depth to Water: 5.20 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 13.50 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 8.30 feet

Volume of Standing Water: 1.33 gallons

Volume to be removed: 3.99 gallons

Actual Volume removed: 6.00 gallons

III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other _____

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other _____

Pump Flow Rate: 0.7 gpm

Purge Start: 16:20

Purge Time: 9 min.

Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
16:23	2	5.43	0.094	8.2	6.9
16:26	4	5.48	0.098	8.0	6.7
16:29	6	5.51	0.094	7.6	6.7

Depth to water after purge: 5.38 ft. below m.p.

Time: 16:29

Depth to water prior to sampling: 5.38 ft. below m.p.

Time: 16:29

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other _____

Sample Odor: ☒ None

☐ Other _____

IV. Sample Analyses:

Sample Parameters: Metals

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 1/22/04

WELL SAMPLING LOG

Gannett Fleming
202 Wall Street
Princeton, New Jersey 08540
(609) 279-9140 (Telephone)
(609) 279-9436 (Facsimile)

I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 42430.002

Project Name: TCE Quarterly Monitoring

Sampled By: RB/SK

Well No.: MW-74

Well Use: Monitoring

Sample ID: MW-74

Sample Date: 1/21/04

Sample Time: 16:56

II. Well Information:

PID Reading: -

Well Diameter: 2 inches

Static Depth to Water: 5.29 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 13.65 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 8.36 feet

Volume of Standing Water: 1.34 gallons

Volume to be removed: 4.02 gallons

Actual Volume removed: 4.50 gallons

III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other _____

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other _____

Pump Flow Rate: 0.4 gpm

Purge Start: 16:45

Purge Time: 11 min.

Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
16:48	1.5	5.36	0.201	9.8	7.8
16:51	3.0	5.41	0.190	10.8	8.0
16:55	4.5	5.39	0.179	9.9	8.6

Depth to water after purge: 5.50 ft. below m.p.

Time: 16:56

Depth to water prior to sampling: 5.50 ft. below m.p.

Time: 16:56 ✓

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other _____

Sample Odor: ☒ None

☐ Other _____

IV. Sample Analyses:

Sample Parameters: Metals

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 1/22/04

WELL SAMPLING LOG

Gannett Fleming
202 Wall Street
Princeton, New Jersey 08540
(609) 279-9140 (Telephone)
(609) 279-9436 (Facsimile)

I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 42430.002

Project Name: TCE Quarterly Monitoring

Sampled By: RB/SK

Well No.: MW-75

Well Use: Monitoring

Sample ID: MW-75/MW-85

Sample Date: 1/21/04

Sample Time: 15:35

II. Well Information:

PID Reading: -

Well Diameter: 2 inches

Static Depth to Water: 4.54 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 70.00 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 65.46 feet

Volume of Standing Water: 10.47 gallons

Volume to be removed: 31.41 gallons

Actual Volume removed: 32.00 gallons

III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other _____

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other _____

Pump Flow Rate: 4.0 gpm

Purge Start: 15:27

Purge Time: 8 min.

Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
15:29	10	4.14	0.030	5.4	13.6
15:31	20	4.10	0.027	10.8	13.2
15:33	30	4.13	0.026	10.8	13.3

Depth to water after purge: 4.62 ft. below m.p.

Time: 15:35

Depth to water prior to sampling: 4.62 ft. below m.p.

Time: 15:35

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other _____

Sample Odor: ☒ None

☐ Other _____

IV. Sample Analyses:

Sample Parameters: Voc, Metals, TDS, TSS

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 1/22/04

WELL SAMPLING LOG

Gannett Fleming
202 Wall Street
Princeton, New Jersey 08540
(609) 279-9140 (Telephone)
(609) 279-9436 (Facsimile)

I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 42430.002

Project Name: TCE Quarterly Monitoring

Sampled By: RB/SK

Well No.: MW-76

Well Use: Monitoring

Sample ID: MW-76

Sample Date: 1/21/04

Sample Time: 15:11

II. Well Information:

PID Reading: -

Well Diameter: 2 inches

Static Depth to Water: 5.16 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 70.00 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 64.84 feet

Volume of Standing Water: 10.37 gallons

Volume to be removed: 31.11 gallons

Actual Volume removed: 32.00 gallons

III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other _____

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other _____

Pump Flow Rate: 2.9 gpm

Purge Start: 15:00

Purge Time: 11 min. ✓

Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
15:03	10	4.21	0.135	9.7	13.1
15:06	20	4.20	0.151	9.6	13.2
15:09	30	4.19	0.159	9.9	13.1

Depth to water after purge: 5.25 ft. below m.p.

Time: 15:11

Depth to water prior to sampling: 5.25 ft. below m.p.

Time: 15:11 ✓

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other _____

Sample Odor: ☒ None

☐ Other _____

IV. Sample Analyses:

Sample Parameters: Voc, Metals, TDS, TSS

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 1/22/04

WELL SAMPLING LOG

Gannett Fleming
202 Wall Street
Princeton, New Jersey 08540
(609) 279-9140 (Telephone)
(609) 279-9436 (Facsimile)

I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 42430.002

Project Name: TCE Quarterly Monitoring

Sampled By: RB/SK

Well No.: MW-77

Well Use: Monitoring

Sample ID: MW-77

Sample Date: 1/21/04

Sample Time: 14:48

II. Well Information:

PID Reading: -

Well Diameter: 2 inches

Static Depth to Water: 5.07 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 70.00 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 64.93 feet

Volume of Standing Water: 10.39 gallons

Volume to be removed: 31.17 gallons

Actual Volume removed: 32.00 gallons

III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other _____

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other _____

Pump Flow Rate: 3.2 gpm

Purge Start: 14:38

Purge Time: 10 min.

Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
14:41	10	3.93	0.050	10.3	13.1
14:43	20	3.87	0.048	10.6	13.1
14:46	30	3.91	0.047	10.7	13.2

Depth to water after purge: 5.10 ft. below m.p.

Time: 14:48

Depth to water prior to sampling: 5.10 ft. below m.p.

Time: 14:48 ✓

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other _____

Sample Odor: ☒ None

☐ Other _____

IV. Sample Analyses:

Sample Parameters: Voc, Metals, TDS, TSS

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 1/22/04

WELL SAMPLING LOG

Gannett Fleming
202 Wall Street
Princeton, New Jersey 08540
(609) 279-9140 (Telephone)
(609) 279-9436 (Facsimile)

I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 42430.002

Project Name: TCE Quarterly Monitoring

Sampled By: RB/SK

Well No.: MW-78

Well Use: Monitoring

Sample ID: MW-78

Sample Date: 1/21/04

Sample Time: 14:28

II. Well Information:

PID Reading: -

Well Diameter: 2 inches

Static Depth to Water: 4.30 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 70.00 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 65.70 feet

Volume of Standing Water: 10.51 gallons

Volume to be removed: 31.53 gallons

Actual Volume removed: 32.00 gallons

III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other _____

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other _____

Pump Flow Rate: 3.6 gpm

Purge Start: 14:19

Purge Time: 9 min.

Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
14:21	10	4.71	0.024	10.4	13.4
14:24	20	4.71	0.023	9.2	13.5
14:26	30	4.58	0.023	10.1	13.5

Depth to water after purge: 4.35 ft. below m.p.

Time: 14:28

Depth to water prior to sampling: 4.35 ft. below m.p.

Time: 14:28

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other _____

Sample Odor: ☒ None

☐ Other _____

IV. Sample Analyses:

Sample Parameters: Voc, Metals, TDS, TSS

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 1/22/04

WELL SAMPLING LOG

Gannett Fleming
202 Wall Street
Princeton, New Jersey 08540
(609) 279-9140 (Telephone)
(609) 279-9436 (Facsimile)

I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 42430.002

Project Name: TCE Quarterly Monitoring

Sampled By: RB/SK

Well No.: MW-79A

Well Use: Monitoring

Sample ID: MW-79A

Sample Date: 1/21/04

Sample Time: 14:06

II. Well Information:

PID Reading: -

Well Diameter: 2 inches

Static Depth to Water: 4.80 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 70.00 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 65.20 feet

Volume of Standing Water: 10.43 gallons

Volume to be removed: 31.29 gallons

Actual Volume removed: 35.00 gallons

III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other _____

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other _____

Pump Flow Rate: 4.4 gpm

Purge Start: 13:58

Purge Time: 8 min.

Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
14:00	10	4.82	0.109	8.6	12.5
14:02	20	4.54	0.114	9.7	12.7
14:04	30	4.49	0.114	9.5	12.7

Depth to water after purge: 4.86 ft. below m.p.

Time: 14:06

Depth to water prior to sampling: 4.86 ft. below m.p.

Time: 14:06✓

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other _____

Sample Odor: ☒ None

☐ Other _____

IV. Sample Analyses:

Sample Parameters: Voc, Metals, TDS, TSS

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 1/22/04

WELL SAMPLING LOG

Gannett Fleming
202 Wall Street
Princeton, New Jersey 08540
(609) 279-9140 (Telephone)
(609) 279-9436 (Facsimile)

I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 42430.002

Project Name: TCE Quarterly Monitoring

Sampled By: RB/SK

Well No.: MW-80

Well Use: Monitoring

Sample ID: MW-80

Sample Date: 1/21/04

Sample Time: 12:05

II. Well Information:

PID Reading: -

Well Diameter: 2 inches

Static Depth to Water: 4.70 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 59.60 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 54.90 feet

Volume of Standing Water: 8.78 gallons

Volume to be removed: 26.34 gallons

Actual Volume removed: 30.00 gallons

III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other _____

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other _____

Pump Flow Rate: 3.8 gpm

Purge Start: 11:57

Purge Time: 8 min.

Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
11:59	10	4.06	0.139	5.6	13.3
12:02	20	4.04	0.137	5.7	13.8
12:04	30	4.07	0.137	5.7	14.0

Depth to water after purge: 4.78 ft. below m.p.

Time: 12:05

Depth to water prior to sampling: 4.78 ft. below m.p.

Time: 12:05 ✓

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other _____

Sample Odor: ☒ None

☐ Other _____

IV. Sample Analyses:

Sample Parameters: Voc, Metals, TDS, TSS

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 1/22/04

WELL SAMPLING LOG

Gannett Fleming
202 Wall Street
Princeton, New Jersey 08540
(609) 279-9140 (Telephone)
(609) 279-9436 (Facsimile)

I. General Information:

Client Name: Lenox China, Pomona, NJ

Project No.: 42430.002

Project Name: TCE Quarterly Monitoring

Sampled By: RB/SK

Well No.: MW-81

Well Use: Monitoring

Sample ID: MW-81

Sample Date: 1/21/04

Sample Time: 9:12

II. Well Information:

PID Reading: -

Well Diameter: 2 inches

Static Depth to Water: 5.58 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Total Well Depth: 56.50 ft. below m.p.

Measuring Point (m.p.): PVC Casing

Δ h: 50.92 feet

Volume of Standing Water: 8.15 gallons

Volume to be removed: 24.45 gallons

Actual Volume removed: 30.00 gallons

III. Sampling Information:

Purging Method:

☒ Peristaltic Pump

☐ Submersible Pump

☐ Bailer

☐ Other _____

Well Drawdown/Recovery:

☒ Good

☐ Poor

☐ Other _____

Pump Flow Rate: 3.4 gpm

Purge Start: 9:04

Purge Time: 8 min.

Purge Chemistry:

Time	Gallons	pH (Std. Units)	Sp. Cond. (ms)	D. O. (ppm)	Temp. (°C)
9:07	10	3.97	0.067	9.2	11.8
9:09	20	3.98	0.067	8.7	12.0
9:11	30	3.99	0.067	9.1	12.1

Depth to water after purge: 5.60 ft. below m.p.

Time: 9:12

Depth to water prior to sampling: 5.60 ft. below m.p.

Time: 9:12 ✓

Sample Appearance: ☐ Turbid

☐ Slightly Turbid

☒ Clear

☐ Other _____

Sample Odor: ☒ None

☐ Other _____

IV. Sample Analyses:

Sample Parameters: Voc, Metals, TDS, TSS

Metals:

☒ Filtered

☒ Unfiltered

Laboratory: Accutest

Date Shipped: 1/22/04

APPENDIX B

CONTOUR MAP REPORT FORM

JANUARY 20, 2004

Project No.: 42430.002

Project Name: Lenox China, Pomona: TCE Monitoring

Drawing Description: Groundwater Flow Map, January 20, 2004

Contour Map Reporting Form

This reporting form shall accompany each ground water contour map submittal. Use additional sheets as necessary.

1. Did any surveyed well casing elevations change from the previous sampling events? Yes ☐ No ☒

If yes, attach new "Well Certification - Form B" and identify the reason for the elevation Change (damage to casing, installation of recovery system in monitoring well, etc.)

2. Are there any monitoring wells in unconfined aquifers in which the water table elevation is higher than the top of the well screen? Yes ☒ No ☐

If yes, identify these wells.

P-1A, P-5A, P-8A, P-9A, MW-1, MW-3, MW-4, MW-6, MW-8, MW-9, MW-10, MW-11, MW-12S, MW-13, MW-14S, MW-16, MW-17, MW-23, MW-23A, MW-24, MW-25, MW-25A, B30A, MW-75, MW-76, MW-77, MW-78, MW-79A, B-31, B-32, B-53, B-54, B-59, B-66, B-66A, B-67, B-71

3. Are there any monitoring wells present at the site but omitted from the contour map? Yes ☒ No ☐

Unless the omission of the well(s) has been previously approved by the Department, justify the omissions.

Wells omitted from the map are screened in a shallower or deeper groundwater interval than that screened by the recovery well system.

4. Are there any monitoring wells containing separate phase product during this measuring event? Yes ☐ No ☒
Were any of the monitoring wells with separate phase product included in the ground water contour map? Yes ☐ No ☒

If yes, show the formula used to correct the water table elevation.

Project No.: 42430.002Project Name: Lenox China, Pomona: TCE MonitoringDrawing Description: Groundwater Flow Map, January 20, 2004

5. Has the ground water flow direction changed more than 45° from the previous groundwater contour map? Yes ☐ No ☒

If yes, discuss reason for change.

6. Has ground water mounding and/or depressions been identified in the ground water contour map? Yes ☒ No ☐

Unless the ground water mound and/or depressions are caused by the ground water remediation system, discuss the reasons for this occurrence.

7. Are the wells used in the contour map screened in the same water-bearing zone? Yes ☒ No ☐

If no, justify inclusion of those wells.

8. Were the ground water contours
☐ computer generated,
☐ computer aided, or
☒ hand drawn?

If computer aided or generated, identify the interpolation method(s) used.

